STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT ☐
(highlight changes)

APPLICATION FOR PERMIT TO DRILL

5. MINERAL LEASE NO.: UTU-82619	6. SURFACE: Fee/Private
1A. TYPE OF WORK: DRILL ☒ REENTER ☐ DEEPEN ☐	7. IF INDIAN, ALLOTTEE OR TRIBE NAME:
B. TYPE OF WELL: OIL ☐ GAS ☐ OTHER Injection SINGLE ZONE ☐ MULTIPLE ZONE ☒	8. UNIT or CA AGREEMENT NAME:
2. NAME OF OPERATOR: Westwater Farms, LLC (also land owner)	9. WELL NAME and NUMBER: Harley Dome 1
3. ADDRESS OF OPERATOR: P. O. Box 23358, CITY Silverthorne, STATE CO ZIP 80498 PHONE NUMBER: 970-513-8034	10. FIELD AND POOL, OR WILDCAT: Greater Cisco 205
4. LOCATION OF WELL (FOOTAGES) 661253X 4337601Y 39.174575 -109.133300 AT SURFACE: 600.5 feet fnl and 2,139.0 feet fel AT PROPOSED PRODUCING ZONE: As above (vertical well)	11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWNE 10, T19S, R25E, SLM
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: 18 mi NE Cisco, UT via I-70 to Exit 227 then NW 0.6 mi to Old Hwy 6-50 then SW 0.2 mi	12. COUNTY: Grand 13. STATE: UTAH
15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET): 600.5 feet from N property & nearest lease line	16. NUMBER OF ACRES IN LEASE: 90 acres more or less 17. NUMBER OF ACRES ASSIGNED TO THIS WELL: 10
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET): First well on property	19. PROPOSED DEPTH: 1,750 feet 20. BOND DESCRIPTION:
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): 4,864 feet GL (ungraded ground level)	22. APPROXIMATE DATE WORK WILL START: UIC Permit applied for (ASAP) 23. ESTIMATED DURATION: 21 days

24. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT	SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT
11"	8.625" J-55, 24.00 ppf	214'	Class A, 92 sx, 1.18 cuft/sk, 15.6 ppg circ to surface
7.875"	5.5" J-55, 15.50 ppf	1,750'	Class H (50-50 Poz), 144 sx, 1.84 cuft/sk, 12.5 ppg to 735'

25. ATTACHMENTS

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:

☒ WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER (Keough Land Surveying well location plat (Att. 1-A))
☒ EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER (Water supplies listed in Att. 2, Drilling Plan)
☒ COMPLETE DRILLING PLAN and Compliance Checklist (Att. 2)
☐ FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER

NAME (PLEASE PRINT) David L. Allin (970) 254-3114 TITLE Permit Agent

SIGNATURE [signature] DATE May 28, 2009

(This space for State use only)

API NUMBER ASSIGNED: 43-019-31622

Approved by the
Utah Division of
Oil, Gas and Mining

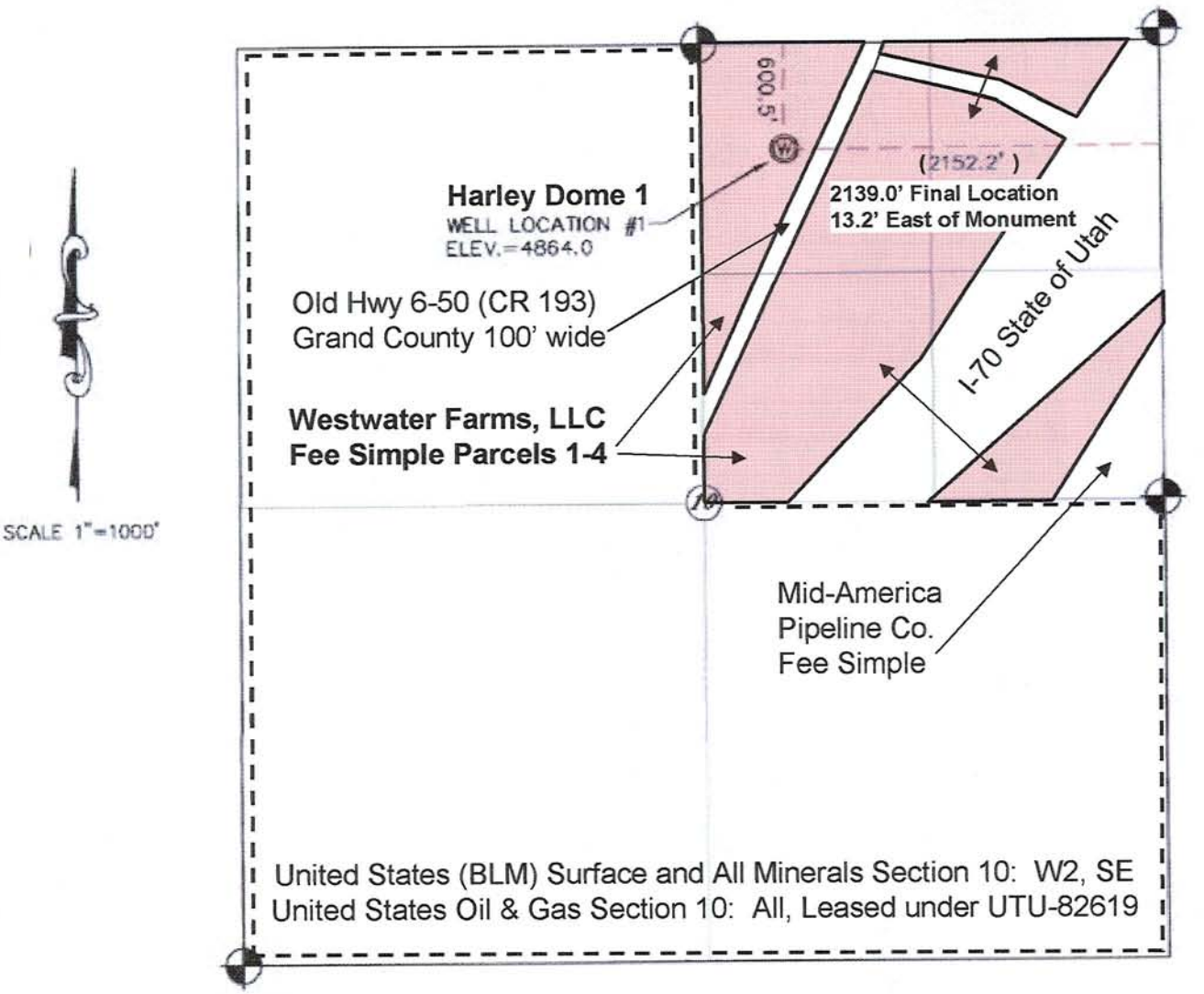
Date: 12-01-09
(See Instructions on Reverse Side)

By: [signature]

(11/2001)

RECEIVED
JUN 01 2009
DIV. OF OIL, GAS & MINING

WELL LOCATION PLAT IN SECTION 10, T 19 S, R 25 E. SLM 600.5 FT. FNL & 2139.0 FT. FEL



LEGEND

FOUND GOVERNMENT MONUMENT

SET SPIKE WITH LATH AT PROPOSED WELL LOCATION **13.2' west offset of final Location to be 600.5' FNL & 2139.0' FEL**

REGISTERED LAND SURVEYOR No.171004 TIMOTHY M. KEOGH STATE OF UTAH

TIMOTHY M. KEOGH

DATE

Attachment 1-A

KEOGH LAND SURVEYING
45 EAST CENTER STREET MOAB, UTAH, 84532

A SURVEY OF

HARLEY DOME #1

WITHIN SECTION 10, T 19 S, R 25 E, SLM,
~~SAN JUAN COUNTY,~~ Grand UTAH

PREPARED FOR

GOLD MTN. REALTY

DATE: 4-7-09	DRAWN BY: TMK	CHECKED BY: TMK
SCALE: 1"=1000'	F.B.# 141	HARLEYDOME.DWG

Allin Proprietary/David L. Allin-Consultant
AAPG Certified Petroleum Geologist 2934 ☼ Utah Licensed Professional Geologist 5526699-2250
475 Seasons Drive, Grand Junction, CO, USA 81507-8749
Telephone: 970-254-3114 Facsimile: 970-254-3117 Mobile: 801-231-7102
E-mail: allinpro@bresnan.net

May 29, 2009

State of Utah
Division of Oil, Gas and Mining
P.O. Box 145801
Salt Lake City, UT 81114-5801

Re: Transmittal of APD for Harley Dome 1 Class II Injection Well
Filed by Westwater Farms, LLC

Ladies and Gentlemen:

Please find enclosed two complete copies of the Form 3, Application for Permit to Drill, and attachments for the Harley Dome 1. This injection well is proposed to be constructed at a regular location per Cause No. 102-16B in NWNE Section 10, T19S, R25E, SLM, Grand County, Utah immediately upon issuance of the UIC permit dated May 21, 2009, the enclosed Application for Permit to Drill and any other permits required.

If you have questions regarding the planning of this project and the permit application, you may direct them to me at the contact points given in the letterhead above.

The applicant and property owner, Westwater Farms, LLC, will be making arrangements with Earlene Russell for the bond on this well and can be contacted at:

Westwater Farms, LLC
c/o Tom Warnes (970) 513-8034
P.O. Box 23358
Silverthorne, CO 80498

Thank you for your attention to this submittal and your help with this important production water recycling and disposal project.

Sincerely yours,

David L. Allin
Permit Agent for Westwater Farms, LLC

cc: Tom Warnes

RECEIVED
JUN 01 2009
DIV. OF OIL, GAS & MINING

Attachment 2: Drilling Program and Compliance Checklist Submittal for
Westwater Farms, LLC Harley Dome 1
New Class II Injection Well on Fee Land
600.5' fnl and 2,139.0' fel, NWNE Section 10, T19S, R25E, SLM, Grand County, Utah

R649-3-4.1 See Form 3, Application for Permit to Drill ("APD") submitted to the Utah Division of Oil, Gas and Mining ("Division") for approval herewith.

R649-3-4.2.1 The Permit Agent, David L. Allin, can be reached at (970) 254-3114 in Grand Junction, Colorado.

R649-3-4.2.2 Westwater Farms, LLC ("Applicant") is entitled to file this APD under the authority of R649-5-2 and the Harley Dome 1 Underground Injection Control permit application dated May 21, 2009 as the owner of the patented fee surface. U.S. Bureau of Land Management ("BLM") Oil and Gas Lease UTU-82619 is in effect for the Federal oil and gas rights in the Applicant's private land. The proposed Harley Dome 1 injection well will not be authorized under the BLM oil and gas lease, and those rights will be preserved and protected.

R649-3-4.2.3 The proposed well is not located in a unit.

R649-3-4.2.4 The location of the proposed well as monumented in the field is depicted by the surveyor's plat. See Attachment 1-A Keough Land Surveying survey of the site of the Harley Dome 1 injection well.

R649-3-4.2.5 The water to be used for the proposed drilling and completion operations will be trucked to the site from the Ute Water Conservancy District tap in Mack, Colorado or a municipal source in Fruita, Colorado. Water from sources requiring Division of Water Rights approval will not be utilized.

R649-3-4.2.6 Elements of the proposed drilling program:

R649-3-4.2.6.1 The estimated tops of important geological markers below GL:

Tununk Shale Mbr of Mancos Shale	Surface
Dakota Sandstone	15'
Cedar Mountain Formation	95'
Brushy Basin Mbr Morrison Formation	160'
Salt Wash Mbr Morrison Formation	580'
Tidwell Mbr Morrison Formation	797'
Summerville Formation	832'
Entrada Sandstone (Slick Rock Mbr)	877'
Kayenta Formation	1,125'
Wingate Sandstone	1,333'
Chinle Formation	1,667'
TD	1,750'

R649-3-4.2.6.2 Prediction and protection of water, oil, gas or other mineral-bearing formations: Coal beds of subcommercial quality and seepage of fresh water may be encountered in the Dakota Sandstone between 15' and 95'. Surface casing will be set at 214' below GL in the upper part of the Brushy Basin Member of Morrison Formation and cemented to the surface to protect any possible resources of fresh water or other minerals near the surface. Natural gas in subcommercial volumes may be encountered in fluvial sandstone layers 8 to 20 feet in thickness located anywhere from 250' to 797' in the Brushy Basin and Salt Wash members of the Morrison Formation. The long (injection) string casing is planned to be set to TD near 1,750' in drilling mud and cemented back up to about 735' to isolate it from the contents of all formations below the surface. No resources of any kind are anticipated below the Morrison Formation.

R649-3-4.2.6.3 The pressure control equipment will be composed of a blow-out preventer with both blind and pipe rams rated for 3,000 psi working pressure that can be operated from a remote control station at least 50' from the well plus a rotating head rated for 500 psi working pressure. The drilling spool on the surface casing head below the blow-out preventer will be equipped with a kill line and check valve and a flow line with a gauge, valve and second valve or adjustable choke all of minimum 2" diameter and rated for no less than 1,500 psi working pressure. See Attachment 2-A schematic diagram of the blow-out prevention equipment ("BOPE"). Upon installation on the surface casing, the double-ram preventer and surface casing will be tested to 1,000 psi for ten minutes with no more than 5% pressure loss. The Division will be notified 24 hours in advance of all testing to be performed on the BOPE as required by R649-3-6.2.3. A record of the BOPE and casing tests will be maintained until the well is completed and that record will be submitted to the Division if required per R649-3-7.3.

Before drilling through the surface casing shoe, the bit will be checked to verify the presence of an operable float valve, the Kelly cock will be checked for operation and repaired if necessary. A stabbing valve suitable for use in the boxes of the drill pipe plus the Kelly cock wrench will be kept handy at the driller's station.

In accordance with R649-3-7.4 the double ram blow-out preventer will be checked for physical operation each trip and all BOPE components will be tested monthly to 250 psi for ten minutes with no more than 5% pressure loss. All tests of BOPE will be noted in the driller's log and that log will be available for examination by the Director or an authorized agent during routine inspections.

R649-3-4.2.6.4 The primary rotary rig included with the drilling equipment will be the Gardner-Denver 3000 fielded by Propetroco, Inc. of Moab, Utah or a similar mobile rig. The rig and its auxiliary equipment and supplies are typically rigged up on a level pad 150' in width and 250' in length (parallel to the rig). A blooie pit will be dug at a position generally south of the well at a distance to accommodate a 105' blooie line. A reserve pit will be dug next to the steel mud pits if and when the drilling system must be converted to circulate mud as dictated by conditions in the well. See Attachment 2-B depicting the drilling pad layout.

Two strings of casing are planned to be run to complete the construction of the well. Five joints of 8.625" 24.0 ppf, J-55, 8 rd ST&C casing will be set in 11.0" diameter hole with a cement float shoe on bottom at a depth of approximately 214' below the surface of the ground. The surface

casing string will be cemented from the float shoe to the surface with 92 sacks (including 100% excess) Class A cement mixed to yield 1.18 cubic ft/sack with 15.6 lbs/gallon slurry weight. The gross slurry volume available will be 19.3 barrels to allow topping off the annulus if the cement sinks. The injection casing or long string will be composed of 5.5" 15.5 ppf, J-55, 8 rd ST&C casing that will be set in 7.875" hole with a guide shoe on bottom near 1,750' and a cement float collar one joint up. The injection casing will be cemented from the guide shoe to approximately 100' over the top of the Summerville formation near 735' with 144 sacks (with 50% excess) of Class H (50-50 Pozmix) cement containing 4.0 lbs/sk gel, 8.0 lbs/sk Silicalite, 4.0 lbs/sk Granulite, 0.5 lb/sk Halad-344, 0.5 lb/sk Versaset and 0.25 lb/sk Poly-E-Flake to yield 1.84 cubic ft/sack with 12.5 lbs/gallon slurry weight. The gross slurry volume available will be 47.0 barrels.

R649-3-4.2.6.5 The surface and long string segments of the well will be drilled as far as possible circulating with air/mist/foam. Water production or caving problems in the well will determine the points where the well must be continued using gel/chem mud composed of bentonite, a polymer viscosity-builder and shale stabilizer and a pH modifier if necessary. No weighting material will be necessary. Sufficient supplies of the ingredients to mix mud and circulate the well will be on site when the surface casing shoe is drilled. The mud system will be monitored by visually checking the steel mud pit level.

R649-3-4.2.6.6 No testing or coring is planned. Upon reaching TD and achieving circulation with conditioned mud, the well will be logged with tools to record gamma ray, neutron-density, caliper, spontaneous potential and resistivity data. All logs will be recorded from TD to the surface casing shoe and the gamma ray log will be recorded to the surface for correlation purposes.

R649-3-4.2.6.7 The expected bottom hole pressure will not exceed 700 psi. The Lansdale Government 13 (API No. 43-019-30008) at a distance of 1.1 miles to the northwest from the proposed site drilled into Pre-Cambrian granite at 1,820' during 1968 without encountering abnormal pressures or temperatures or potential hazards, such as hydrogen sulfide. Similar benign conditions are anticipated in the proposed well.

R649-3-4.2.6.8 The proposed well will be completed and tested in conformance with the requirements of R649-5 as they pertain to underground injection control of Class II wells.

Westwater Farms, LLC as the owner of the underlying property and the operator of the proposed well wishes to exert and maintain control over the management of the surface and uses of the surrounding property to the full extent allowed while insuring compliance with the Division's Rules and other State of Utah, Federal and Grand County regulations or ordinances.

R649-3-4.2.6.9 The requirements of this rule are not applicable to this vertical well.

R649-3-4.2.7 The Applicant, Westwater Farms, LLC will also be the operator of the well nullifying the need to file Form 5, Designation of Agent or Operator.

R649-3-4.2.8 An Onsite Predrill Evaluation is required under this rule prior to approval of an APD because of Fee surface. The Applicant as both owner of the surface and operator of the well is

willing to proceed without an onsite meeting, but will leave the decision to hold such a meeting solely in the hands of the Division.

R649-3-4.3 This APD used Form 3 provided by the Division.

R649-3-5 The well will be identified by a sign posted in a conspicuous place near the well. The sign will be of durable construction with lettering kept in legible condition large enough to be read under normal conditions at a distance of 25'. The well numbering system utilized on the property will be a non-repetitive, logical and distinctive sequence. The sign will show the name of the well, the operator, emergency contact number, lease name and location by quarter section, township and range.

R649-3-6.1 Drilling operations will be conducted according to the drilling program approved under this APD by the Division. Any changes except mitigation of emergency conditions will be submitted to the Division on Form 9, Sundry Notices and Reports on Wells, for approval, and Division approval will be obtained prior to implementation. The Division will be given verbal notice of emergency changes within 24 hours and the operator will file a written notice using Form 9 within five days.

R649-3-6.2 *Reporting Requirements*. Written notices and filing of forms with the Division will be directed to:

Utah Division of Oil, Gas and Mining
P.O. Box 145801
Salt Lake City, UT 84114-5801

The telephone number of the Division receptionist during business hours and number to be used for leaving routine messages after business hours is:

Utah DOGM: (801) 538-5340.

MAJOR UNDERSIRABLE EVENTS must be reported by telephone immediately after calling for emergency services if needed. In the case of a major undesirable event ONLY, a notification to the Division can be made after business hours by calling (801) 243-9466.

Westwater Farms, LLC as operator will comply with the following routine reporting requirements to the Division:

1. The spudding of this well will be reported within 24 hours. This report will include the well name, drilling contractor, rig number and type, spud date and time, the date that continuous drilling will commence, the name of the reporter and the reporter's contact number. The spud report can be directed to Oil and Gas Well Information Specialist, Carol Daniels, verbally by calling (801) 538-5284 or transmitting e-mail to Ms. Daniels at caroldaniels@utah.gov.

2. Within five working days of spudding the well, the operator will fill out and file Form 6, Entity Action Form, to receive the well's entity number for future operational reporting requirements.

3. 24 hours advance notice of testing blow-out preventer equipment.

4. A monthly status report on the well will be filed until such time as the well is completed and the well completion report is filed. The monthly reports will be filed on Form 9 and include the well depth and a description of the operations conducted on the well during the month. The reports are due no later than the fifth day of the following calendar month.

5. 24 hours advance notice of casing tests required prior to drilling through the casing shoe or continuing with completion operations.

6. Fresh water aquifer layers encountered during drilling will be reported on Form 7, Report of Water Encountered During Drilling. This report will be filed with Form 8, Well Completion or Recompletion Report and Log.

R649-3-14 *Fire Hazards on the Surface*. All rubbish or debris that might constitute a fire hazard shall be removed to a distance of at least 100' from the well location, tanks, separator, or any structure. All waste oil or gas shall be burned or disposed of in a manner to avert creation of a fire hazard.

Any gas other than poisonous gas escaping from the well during drilling operations will be conducted to the blooie pit by the blooie line or gas buster line where a continuous igniter will insure that the gas is burned. The end of the blooie line will be 105' from the well.

R649-3-15 *Pollution and Surface Damage Control.* Westwater Farms, LLC will take all reasonable precautions to avoid polluting lands, streams, reservoirs, natural drainage ways, and underground water.

Westwater Farms, LLC will carry on all operations and maintain the property at all times in a safe and workmanlike manner having due regard for the preservation and conservation of the property and for the health and safety of employees and people residing in close proximity to those operations.

At a minimum, Westwater Farms, LLC will:

1. Take reasonable steps to prevent and will remove accumulations of oil or other materials deemed to be fire hazards from the vicinity of the well locations, lease tanks and pits;

2. Remove from the property or store in an orderly manner, all scrap or other materials not in use;

3. Provide secure workmanlike storage for chemical containers, barrels, solvents, hydraulic fluid and other non-exempt materials;

4. Maintain tanks in a workmanlike manner that will preclude leakage and provide for all applicable safety measures and construct berms of sufficient height and width to contain the quantity of the largest tank at the storage facility;

5. Insure that the use of storage tanks for crude oil or water without tops is limited to well testing operations;

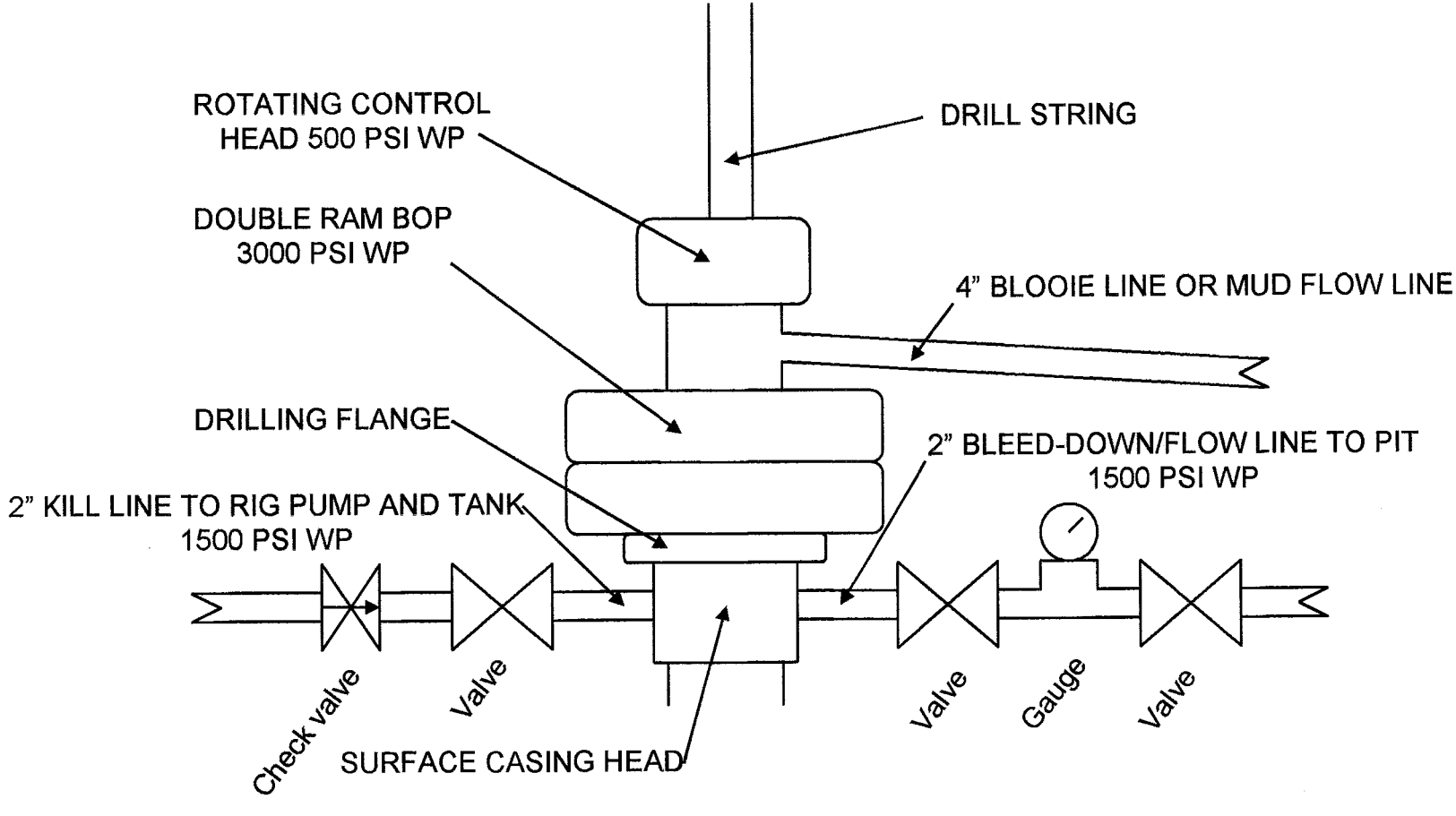
6. Catch leaks and drips contain spills and cleanup promptly;

7. Practice waste reduction and recycling in order to help reduce disposal volumes;

8. Dispose of produced water, tank bottoms and other miscellaneous waste in a manner that is in compliance with Division's Rules and other Utah State, Federal and Grand County regulations or ordinances; and

9. Use good housekeeping practices in general.

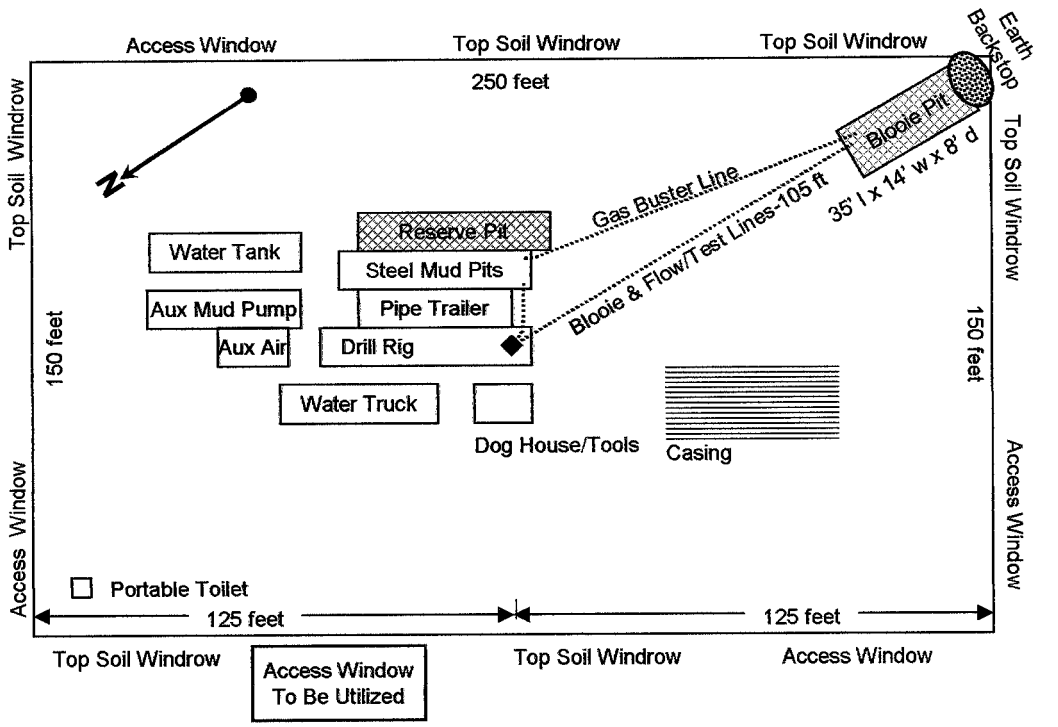
Attachment 2-A: Westwater Farms, LLC
Pressure Control System for Greater Cisco Field Operations
Not drawn to scale



Attachment 2-A

Attachment 2-A

Westwater Farms, LLC Harley Dome Injection Well
Drilling Operation Pad & Equipment Layout
Propetroco, Inc. Number 1 Rig or Equivalent Mobile Drilling Rig
Scale: 1 Inch = 50 Feet

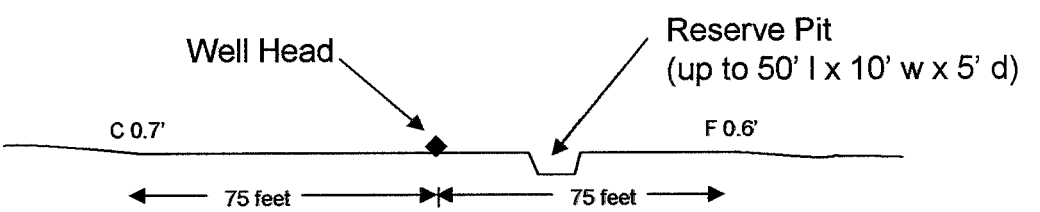


◆ Well Head

Gross possible disturbed area 170 x 270 feet

Access roads typically 16 feet to 18 feet wide with maximum disturbed width 30 feet

Cut and Fill Profile West-East Through Well Head



WORKSHEET

APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 06/01/2009

API NO. ASSIGNED: 43-019-31622

WELL NAME: HARLEY DOME 1

OPERATOR: WESTWATER FARMS LLC (N3525)

PHONE NUMBER: 970-254-3114

CONTACT: DAVID ALLIN

PROPOSED LOCATION:

NWNE 10 190S 250E

SURFACE: 0600 FNL 2139 FEL

BOTTOM: 0600 FNL 2139 FEL

COUNTY: GRAND

LATITUDE: 39.17458 LONGITUDE: -109.13330

UTM SURF EASTINGS: 661253 NORTHINGS: 4337601

FIELD NAME: GREATER CISCO (205)

INSPECT LOCATN BY: / /		
Tech Review	**Initials**	**Date**
Engineering	DKD	8/10/09
Geology		
Surface		

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-82619

PROPOSED FORMATION: CHIN

SURFACE OWNER: 4 - Fee

COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

✓ Plat

✓ Bond: Fed[] Ind[] Sta[] Fee[]
(No. 8429377339)

N Potash (Y/N)

N Oil Shale 190-5 (B) or 190-3 or 190-13

✓ Water Permit
(No. MUNICIPAL)

N RDCC Review (Y/N)
(Date:)

Y Fee Surf Agreement (Y/N)
Westwater is Surface owner

NA Intent to Commingle (Y/N)

LOCATION AND SITING:

___ R649-2-3.

Unit: _____

___ R649-3-2. General

Siting: 460 From Qtr/Qtr & 920' Between Wells

___ R649-3-3. Exception

✓ Drilling Unit

Board Cause No: 102-16(B)

Eff Date: 11-15-1979

Siting: 500' fr Property Lease Line & 200' fr 1/4 1/4 Lines

___ R649-3-11. Directional Drill

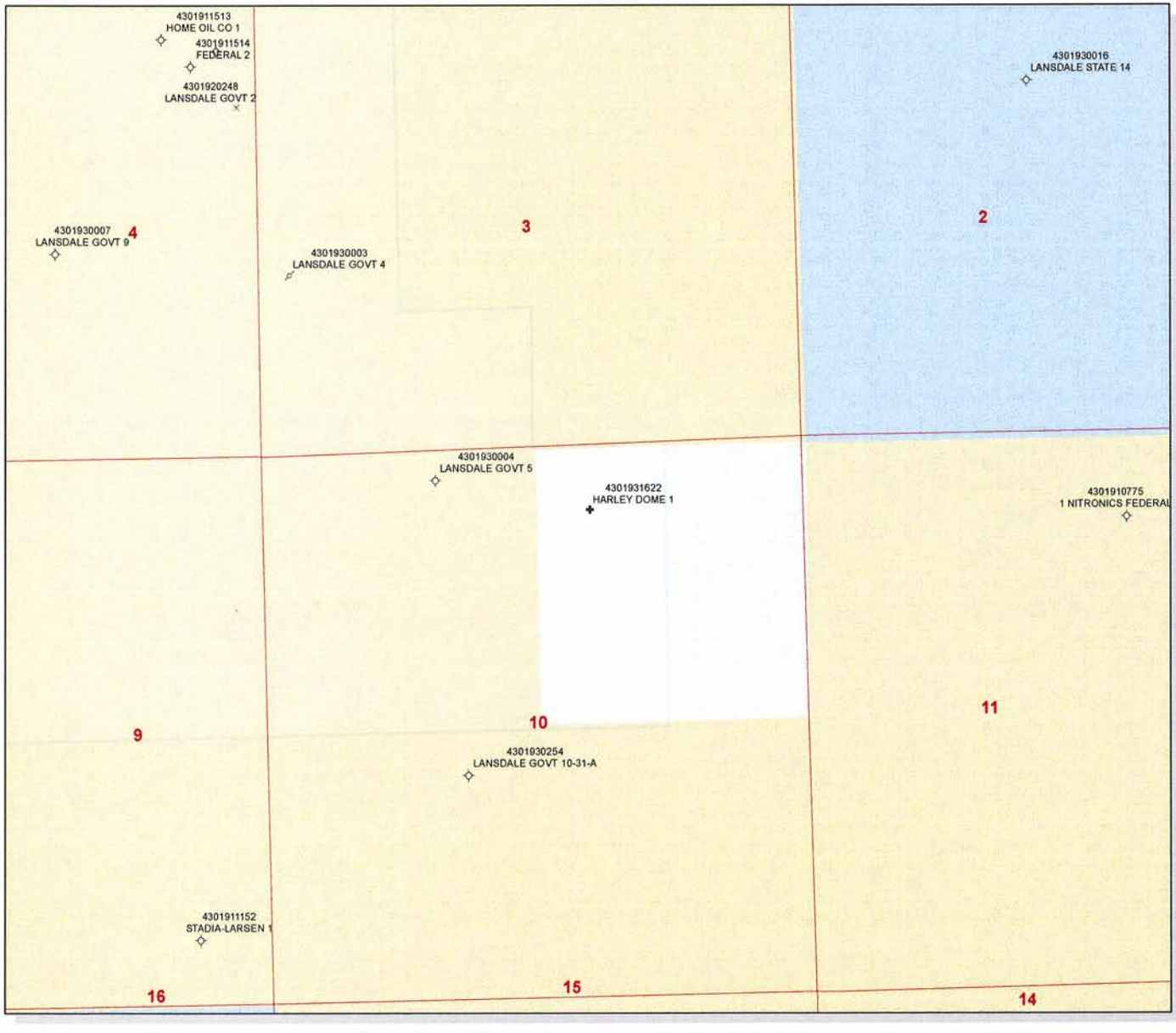
COMMENTS: Needs Presite (06-16-09)

STIPULATIONS: ~~1- Federal Approval~~

2- STATEMENT OF BASIS

3 - Cement Stip #4 (8 5/8" and 5 1/2")

4- If water is encountered in Entrada while drilling it should be sampled prior to continuing drilling into the Kayenta Fm - Kayenta formation



API Number: 4301931622

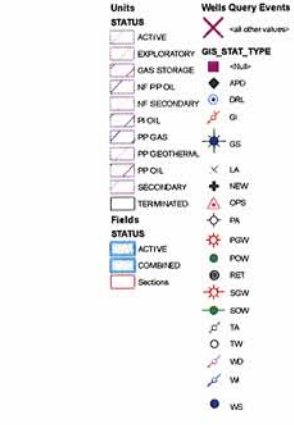
Well Name: HARLEY DOME 1

Township 19.0 S Range 25.0 E Section 10

Meridian: SLBM

Operator: WESTWATER FARMS LLC

Map Prepared:
Map Produced by Diana Mason



1:12,000

Application for Permit to Drill
Statement of Basis

APD No	API WellNo	Status	Well Type	Surf Ownr	CBM
1612	43-019-31622-00-00		WI	P	No

Operator WESTWATER FARMS LLC **Surface Owner-APD**
Well Name HARLEY DOME 1 **Unit**
Field GREATER CISCO **Type of Work**
Location NWNE 10 19S 25E S 600 FNL 2139 FEL GPS Coord (UTM) 661253E 4337601N

Geologic Statement of Basis

Significant volumes of high quality ground water are likely to be encountered in the bedrock at this location. A poorly permeable soil is likely to be developed on the thin cover of Lower Shale Member of the Mancos Shale that may overlie the Cretaceous age Dakota Sandstone. Good quality water is likely to be encountered in permeable Mesozoic sandstones found below the Mancos Shale. The well is likely to penetrate as many as four locally recognized aquifers. The proposed casing and cementing program and benign mud system should adequately isolate any zones of fresh water that may be penetrated. No underground water rights have been filed on any area within a mile of the proposed well site.

Chris Kierst — 7/9/2009
APD Evaluator — **Date / Time**

Surface Statement of Basis

Pre-site evaluation completed June 16, 2009. In attendance: Bart Kettle-DOGM, Wayne Downs-Grand County, Mark Wright-Grand County, Tom Warnes-Westwater Farms, LLC

As proposed the project falls within a previously disturbed site for the proposed Westwater Farms water treatment facility. Vegetation is dominated by weedy annual species and soils are actively eroding from spring winds at inspection. Drainage from tanks for water treatment facility into secondary containment flows through the proposed well pad. Additional culvert will be required for well pad access and work space.

Reserve pit is being permitted as 50' long x 10' wide x 5' deep. Pit shall be properly lined with a 12 mil liner. Reserve pit shall not be used for the storage of produced fluids, outside E&P waste or secondary containment for the proposed waste water treatment facility. Consistent with the Utah Oil and Gas Conservation General Rules R649-3 the reserve pit shall be reclaimed within one year following drilling of the well bore.

Grand County requires road encroachment permit for County Rd 193, building permit and compliance with land use code. In addition county is requesting funds for review to be placed on deposit.

Bart Kettle — 6/16/2009
Onsite Evaluator — **Date / Time**

Conditions of Approval / Application for Permit to Drill

Category	Condition
Pits	A synthetic liner with a minimum thickness of 12 mils shall be properly installed and maintained in the reserve pit.
Surface	Drainages adjacent to the proposed pad shall be diverted around the location.

ON-SITE PREDRILL EVALUATION

Utah Division of Oil, Gas and Mining

Operator WESTWATER FARMS LLC
Well Name HARLEY DOME 1
API Number 43-019-31622-0 **APD No** 1612 **Field/Unit** GREATER CISCO
Location: 1/4,1/4 NWNE **Sec** 10 **Tw** 19S **Rng** 25E 600 FNL 2139 FEL
GPS Coord (UTM) **Surface Owner**

Participants

Bart Kettle-DOGM, Wayne Downs-Grand County, Mark Wright-Grand County, Tom Warnes-Westwater Farms, LLC

Regional/Local Setting & Topography

Proposed project site is located at the former Harley Dome site, in Grand County Utah. Annual precipitation is 8-10", vegetation is sparse at the project site, but would be described as salt scrub and Wyoming sage rangelands. Topography immediately adjacent to the project site is gently rolling clay flats. Drainage is to the southeast entering the Colorado River within 5 miles. No perennial water was observed in close proximity to the proposed project site. Drainages in the immediate area are ephemeral in nature, being dry throughout a majority of the year. On a regional setting the project is located in the Cisco Desert on the toe of the Uncompadgree up lift, a region known for it's harsh growing conditions due to low precipitation, and poorly developed salty soils. I-70, Rabbit Valley rest area, and Union Pacific train tracks are all located in close proximity to the proposed project.

Surface Use Plan

Current Surface Use

Agricultural
Industrial

New Road Miles	Well Pad		Src Const Material	Surface Formation
0.1	**Width** 150	**Length** 250		DKMNC

Ancillary Facilities

Waste Management Plan Adequate?

Environmental Parameters

Affected Floodplains and/or Wetland N

Flora / Fauna

Grass: Annual wheat grass spp., curly gallata, Indian Rice grass.

Forbs: Red steam filaree, Russian thistle, sunflower, annual kochia, tumble mustard, scarlet globe mallow, purple mustard, aster spp., western salsify, prickly lettuce.

Shrubs: None

Trees: None

Soil Type and Characteristics

Pale orange sandy clay mixture.

Erosion Issues Y

Soils prone to wind erosion once disturbed

Sedimentation Issues N

Site Stability Issues N

Drainage Diverson Required N

Drainage will require a culvert to flow under proposed well pad.

Berm Required? N

Erosion Sedimentation Control Required? N

Recommend re-seeding and establishment of perennial vegetation as soon as practical following disturbance.

Paleo Survey Run? N **Paleo Potental Observed?** N **Cultural Survey Run?** N **Cultural Resources?** N

Reserve Pit

Site-Specific Factors		Site Ranking
Distance to Groundwater (feet)	>200	0
Distance to Surface Water (feet)	>1000	0
Dist. Nearest Municipal Well (ft)	>5280	0
Distance to Other Wells (feet)	>1320	0
Native Soil Type	Mod permeability	10
Fluid Type	Fresh Water	5
Drill Cuttings	Normal Rock	0
Annual Precipitation (inches)	10 to 20	5
Affected Populations	<10	0
Presence Nearby Utility Conduits	Unknown	10
	Final Score	30 1 **Sensitivity Level**

Characteristics / Requirements

Closed Loop Mud Required? N **Liner Required?** Y **Liner Thickness** 12 **Pit Underlayment Required?** N

Other Observations / Comments

Proposed project area is located on fee surface, held by Westwater Farms, LLC. Minerals at the site are federal. Moab BLM contacted and declined participation at the presite evaluation. Minerals group doesn't manage applications for injection, and as such are defaulting to the Divisions UIC program for well bore and surface evaluation.

Grand County inquired regarding public input regarding UIC permitting at the time of the presite evaluation. Division informed the county presite evaluations are set up and conducted to asses impacts to surface resources. Public comment regarding geology and ground water as they relate to UIC permitting would be heard at a later date. Grand County request to be included in the geologic review of the well bore.

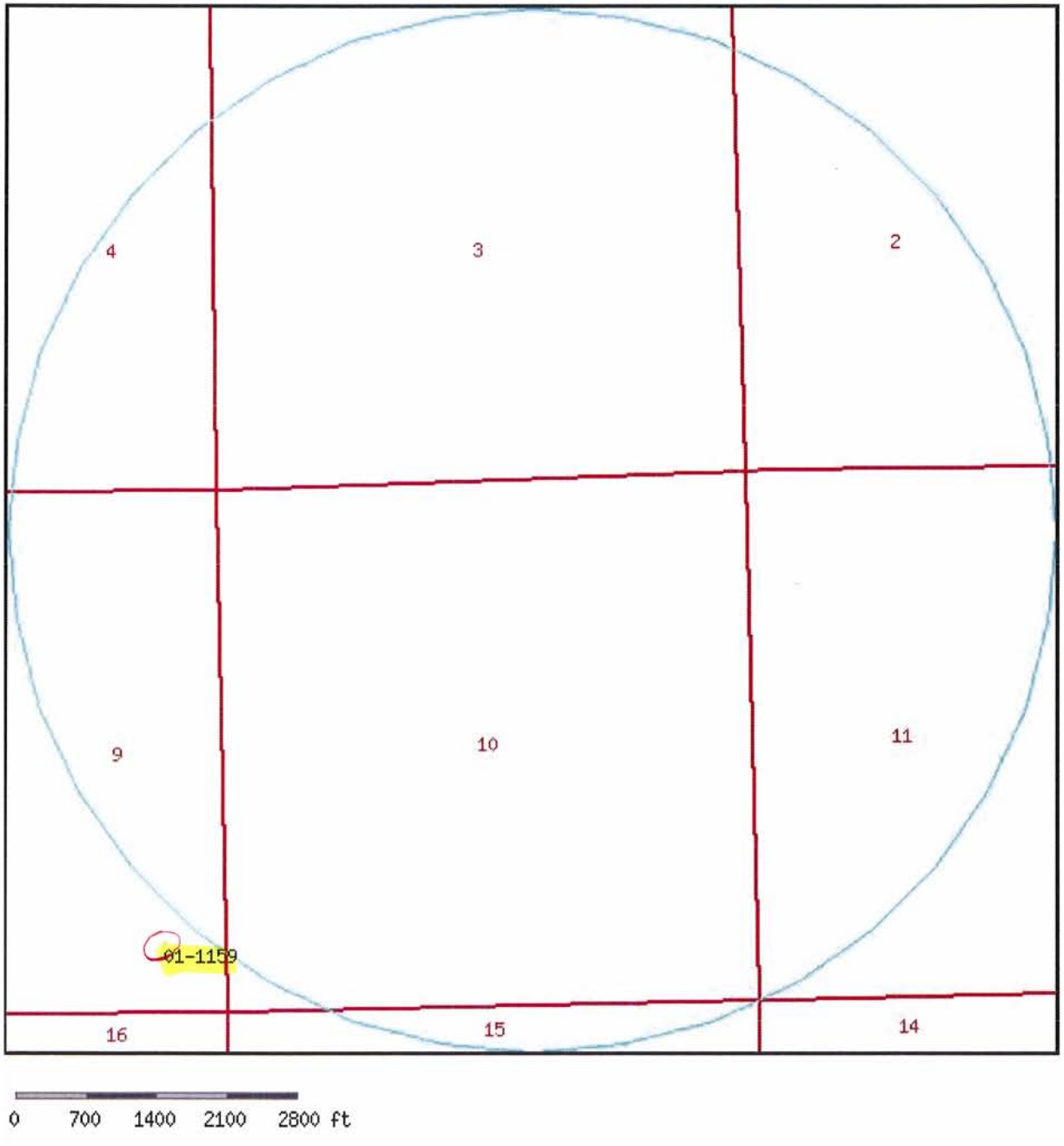
Bart Kettle	6/16/2009
Evaluator	**Date / Time**

Utah Division of Water Rights

Output Listing

Version: 2009.05.06.00 Rundate: 07/09/2009 08:34 AM

Radius search of 5280 feet from a point S600.5 W2139 from the NE corner, section 10, Township 19S, Range 25E, SL b&m
Criteria:wrtypes=W,C,E podtypes=S,U,Sp status=U,A,P usetypes=all

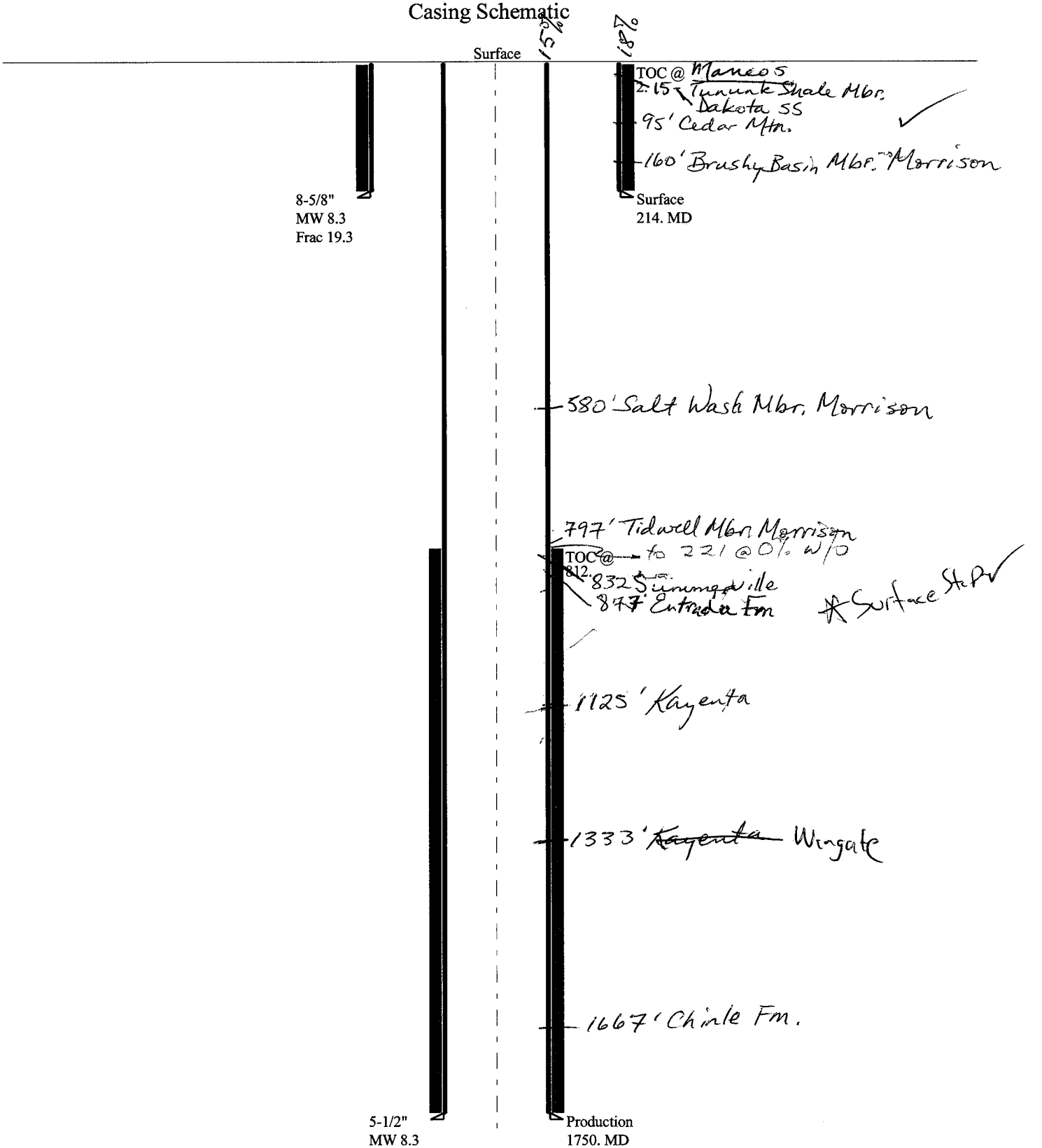


Water Rights

WR Number	Diversion Type/Location	Well Log	Status	Priority	Uses	CFS	ACFT	Owner Name
01-1159	Underground N673 W642 SE 09 19S 25E SL	well info	A	20070613	O	0.000	49.100	USA BUREAU OF LAND MANAGEMENT 82 EAST DOGWOOD

43019316220000 Westwater Harley Dome 1

Casing Schematic



Well name:	**43019316220000 Westwater Harley Dome 1**
Operator:	**Westwater Farms, LLC**
String type:	Surface
Project ID:	43-019-31622-0000
Location:	Grand County

Design parameters:

Collapse

Mud weight: 8.330 ppg
Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 188 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 214 psi

No backup mud specified.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Tension:

8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.50 (B)

Tension is based on air weight.
Neutral point: 187 ft

Environment:

H2S considered? No
Surface temperature: 65 °F
Bottom hole temperature: 68 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 120 ft

Cement top: 2 ft

Non-directional string.

Re subsequent strings:

Next setting depth: 1,750 ft
Next mud weight: 8.330 ppg
Next setting BHP: 757 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 214 ft
Injection pressure: 214 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft^3)
1	214	8.625	24.00	J-55	ST&C	214	214	7.972	76.5

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	93	1370	14.794	214	2950	13.79	5	244	47.51 J

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Mining

Phone: 810-538-5357

Date: August 5,2009
Salt Lake City, Utah

ENGINEERING STIPULATIONS: NONE
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.
Collapse is based on a vertical depth of 214 ft, a mud weight of 8.33 ppg The casing is considered to be evacuated for collapse purposes.
Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

Well name:	**43019316220000 Westwater Harley Dome 1**
Operator:	**Westwater Farms, LLC**
String type:	Production
Project ID:	43-019-31622-0000
Location:	Grand County

Design parameters:

Collapse

Mud weight: 8.330 ppg
Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 547 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 757 psi

No backup mud specified.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Tension:

8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.50 (B)

Tension is based on air weight.
Neutral point: 1,529 ft

Environment:

H2S considered? No
Surface temperature: 65 °F
Bottom hole temperature: 90 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 368 ft

Cement top: 812 ft

Non-directional string.

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft^3)
1	1750	5.5	15.50	J-55	ST&C	1750	1750	4.825	233.9

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	757	4040	5.335	757	4810	6.35	27	202	7.45 J

Prepared by: Helen Sadik-Macdonald, Div of Oil,Gas & Mining
Phone: 810-538-5357
Date: August 5,2009
Salt Lake City, Utah

ENGINEERING STIPULATIONS: NONE
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.
Collapse is based on a vertical depth of 1750 ft, a mud weight of 8.33 ppg The casing is considered to be evacuated for collapse purposes.
Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

BOPE REVIEW — Westwater Harley Dome 1 API 43-019-31622-0000

INPUT

Well Name	Westwater Harley Dome 1 API 43-019-31622-0000			
	String 1	String 2		
Casing Size (")	8 5/8	5 1/2		
Setting Depth (TVD)	214	1750		
Previous Shoe Setting Depth (TVD)	0	214		
Max Mud Weight (ppg)	8.33	8.33	✓	
BOPE Proposed (psi)	500	3000		
Casing Internal Yield (psi)	2950	4810		
Operators Max Anticipated Pressure (psi)	700	7.7 ppg	✓	

Calculations	String 1	8 5/8 "		
Max BHP [psi]	.052*Setting Depth*MW =	93		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	67	YES ✓	Air Drill
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	46	YES	
			***Can Full Expected Pressure Be Held At Previous Shoe?**	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth) =	46	← NO OK	
Required Casing/BOPE Test Pressure		214	psi	
***Max Pressure Allowed @ Previous Casing Shoe =**		0	psi	*Assumes 1psi/ft frac gradient

Calculations	String 2	5 1/2 "		
Max BHP [psi]	.052*Setting Depth*MW =	758		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	548	YES	
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	373	YES ✓	
			***Can Full Expected Pressure Be Held At Previous Shoe?**	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth) =	420	← NO OK	
Required Casing/BOPE Test Pressure		1750	psi	
***Max Pressure Allowed @ Previous Casing Shoe =**		214	psi	*Assumes 1psi/ft frac gradient

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-82619	
6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A	
7. UNIT or CA AGREEMENT NAME: N/A	
1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☐ OTHER Injection	8. WELL NAME and NUMBER: Harley Dome 1
2. NAME OF OPERATOR: Westwater Farms, LLC (also land owner)	9. API NUMBER: 43-019-31622
3. ADDRESS OF OPERATOR: P.O. Box 23358 CITY Silverthorne STATE CO ZIP 84078 / PHONE NUMBER: 970-513-8034	10. FIELD AND POOL, OR WILDCAT: Greater Cisco
4. LOCATION OF WELL: FOOTAGES AT SURFACE: 600.5 feet fnl and 2,139.0 feet fel	COUNTY: Grand
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWNE, Section 10, T19S, R 25E, SLM	STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☒ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start: October 7, 2009	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☒ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☐ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☐ OTHER:
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Westwater Farms, LLC proposes to eliminate the blow-out preventer from the casing head, retain a rotating head mounted directly on the 8.625"surface casing drilling flange and add a valve to the flow line to drill this injection well. See the schematic diagram, Attachment 1, for further details of the drilling well head design to replace Attachment 2-A to the previously submitted Form 3 APD. Spudding is planned next week as stated above and the surface casing should be set, cemented and ready to continue the long string hole the following week pending approval of this change.

NAME (PLEASE PRINT) David L. Allin 970-254-3114 TITLE Permit Agent

SIGNATURE allinpro@bresnan.net DATE October 2, 2009

(This space for State use only)

APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING
DATE 12/11/09
BY:
* max BHP = 758 psi, max Shoe press. = 214 psi etc.

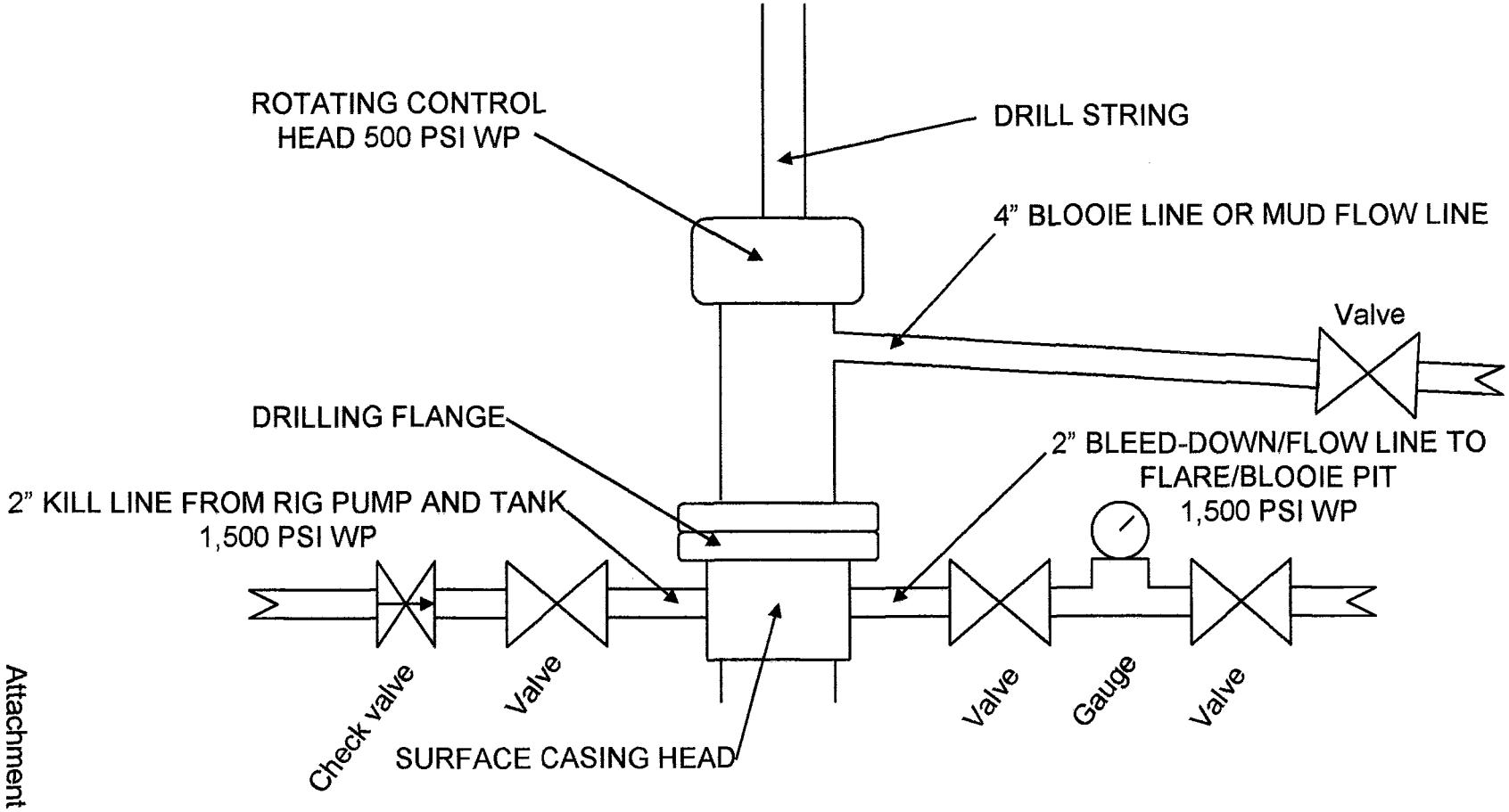
(5/2000) (See Instructions on Reverse Side)

RECEIVED
OCT 05 2009
DIV. OF OIL, GAS & MINING

October 2, 2009 Form 9 Attachment 1

Pressure Control System for Westwater Farms, LLC Harley Dome 1

Not drawn to scale



Attachment 1

Attachment 1

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil Gas and Mining

JOHN R. BAZA
Division Director

December 1, 2009

Westwater Farms, LLC
P.O. Box 23358
Silverthorne, CO 80498

Re: Harley Dome 1 Well, 600' FNL, 2139' FEL, NWNE, Sec. 10, T. 19 South, R. 25 East, Grand County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann.§ 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-019-31622.

Sincerely,

Gil Hunt
Associate Director

js
Enclosures

cc: Grand County Assessor
Bureau of Land Management – Moab Field Office

1594 West North Temple, Suite 1210, PO Box 145801, Salt Lake City, UT 84114-5801
telephone (801) 538-5340 • facsimile (801) 359-3940 • TTY (801) 538-7458 • *www.ogm.utah.gov*

UTAH DNR OIL, GAS & MINING

Operator: Westwater Farms, LLC

Well Name & Number Harley Dome 1

API Number: 43-019-31622

Lease: UTU-82619

Location: NWNE **Sec.** 10 **T.** 19 South **R.** 25 East

Conditions of Approval

1. **General:**
   Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for Permit to drill.

2. **Additional Approvals:**
   The operator is required to obtain approval from the Division of Oil, Gas and mining before performing any of the following actions during the drilling of this well:
   - Any changes to the approved drilling plan – contact Dustin Doucet
   - Significant plug back of the well – contact Dustin Doucet
   - Plug and abandonment of the well – contact Dustin Doucet

3. **Notification Requirements:**
   The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:
   - 24 hours **PRIOR** to the spudding of the well – contact Dan Jarvis or Dustin Doucet
   - 24 hours prior to testing blowout prevention equipment – contact Dan Jarvis
   - 24 hours prior to cementing or testing casing – contact Dan Jarvis
   - Within 24 hours of making any emergency changes to the approved drilling program – contact Dustin Doucet
   - 24 hours prior to commencing operations to plug and abandon the well – contact Dan Jarvis

4. **Contact Information:**
   The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voicemail message if the person is not available to take the call):
   - Carol Daniels 801-538-5284 - office
   - Dustin Doucet 801-538-5281 - office
     801-733-0983 - after office hours
   - Dan Jarvis 801-538-5338 - office
     801-231-8956 - after office hours

5. **Reporting Requirements**
   All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:
   - Entity Action Form (Form 6) – due within 5 days of spudding the well
   - Monthly Status Report (Form 9) – due by 5th day of the following calendar month
   - Request to Change Plans (Form 9) – due prior to implementation
   - Written Notice of Emergency Changes (Form 9) – due within 5 days
   - Notice of Operations Suspension or Resumption (Form 9) – due prior to implementation
   - Report of Water Encountered (Form 7) – due within 30 days after completion
   - Well Completion Report (Form 8) – due within 30 days after completion or plugging

6. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached.)

7. Cement volumes for the 8 5/8" and 5 1/2" casing strings shall be determined from actual hole diameters in order to place cement from the pipe setting depths back to the surface.

8. If water is encountered in Entrada while drilling, it should be sampled prior to continuing drilling into the Kayenta Formation.

Daily Drilling Report Version 2010-05-15-11:45
Westwater Farms, LLC Harley Dome 1 Injection Well, API No. 43-019-31622
600.5' fnl and 2,139' fel (NWNE) Section 10, T19S, R25E, SLM, Greater Cisco Field, Grand County, Utah
Graded Ground Level (GL) Elevation 4,864' and Kelly Bushing (KB) Elevation 4,874'
All depths cited are drilling depths prior to open-hole logging
Submitted by David L. Allin, Well Construction Consultant to Westwater Farms, LLC

2010-05-12 Completed Propetroco, Inc. Rotary Rig 1 move in and rig-up; Westwater Farms support crew dug blooie pit.

2010-05-13 08:00 spudded well with Bit 1: 11" fixed tungsten carbide insert bit on air hammer; Possible top of Morrison Fm near 188' GL; 13:00 reached surface hole TD 218' GL circulating air; Blew hole clean; No shows of oil, gas or water; 14:00 completed TOH with Bit 1 and began to wait for cementing float collar (FC) to be delivered by Halliburton; 15:00 Halliburton dropped off FC and two centralizer stops; 15:15 Mark Wright, Grand County Engineer, on site to check on progress; 15:30 shut down for the day and Propetroco crew off location; Westwater Farms support crew dug reserve pit; TD 218' GL; SDFN

2010-05-14 08:00 strapped five joints of new (2008) 8.625" J-55 24.00 ppf casing at 217.2' plus 1.2' FC for a total surface casing string of 218.4'; 09:00 Bart Kettle, Utah DOGM Petroleum Operations Specialist, on site to observe surface casing setting and cementing ops; 09:30 PU shoe joint but had to lay back down to re-rig lifting gear under traveling block to accommodate 45' length of casing jt; **Note that Propetroco Rig 1 is designed to handle casing joints no longer than 42';** 10:20 TIH surface casing (SC) shoe jt with FC made up and tack welded on bottom with centralizer 2' above; 10:45 TIH SC Jt 2, made up and tack welded on shoe joint top collar; 11:30 TIH SC Jt 3 with centralizer over SC Jt 2 top collar; 11:45 TIH SC Jt 4; 12:00 TIH SC Jt 5 with centralizer 10' below top collar and tagged fill near 214' GL; 12:15 landed casing at TD 218' GL by attaching Kelly rod and circulating fill out of hole with air and reciprocating the SC string to clean hole prior to cementing; No shows of oil, gas or water; 13:30 after lunch break began mixing cmt but delayed to fix minor duplex pump leaks; 14:00 completed mixing first tub of cmt containing 30 sx Portland cmt to yield 1.18 cuft/sack of 15.6 ppg, Class A slurry and total batch volume of 35.4 cuft (6.30 bbls); 14:15 completed top filling of SC/hole annulus with first tub of cement and flushed pump and hoses; 14:40 completed mixing second tub of cmt containing 30 sx; 14:45 SC/hole annulus filled up with 12 cuft cmt left in mixing tub for a grand total net cmt volume of 58.8 cuft (10.47 bbls); 15:00 built dike around casing, topped off with cmt and flushed out pump and hoses; 15:15 safety discussion re long string hole drilling ops; 15:30 checked cmt and no significant fall back; WOC; SDFWE

2010-05-15 11:45 Compiled and filed weekly ops report to DOGM

Carol Daniels - Harley Dome 1, 43-019-31622 weekly rpt

From: "David L Allin"
To: "Carol Daniels"
Date: 5/15/2010 11:56 AM
Subject: Harley Dome 1, 43-019-31622 weekly rpt
CC: "Tom Warnes"
Attachments: "Tom Warnes"

Hi Carol,

My consulting client, Westwater Farms, LLC got started on the construction of their Harley Dome 1 injection well last week. Here is the first compilation of daily activities to serve as the weekly report from that project. More to come.

Dave

Westwater Farms, LLC Consultant

David L. Allin
Vice President, Exploration Manager
Del-Rio Resources, Inc.
AAPG DPA Certified Petroleum Geologist 2934
Professional Geologist Utah DOPL 5526699-2250
475 Seasons Drive
Grand Junction, CO 81507-8749
970-254-3114
allinpro@bresnan.net

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 6

ENTITY ACTION FORM

Operator: Westwater Farms, LLC
Operator Account Number: N 3525
Address: P.O. Box 23358
city Silverthorne
state CO zip 80498
Phone Number: (970) 406-1466

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
43-0193162 2	Harley Dome 1		NWNE	10	19S	25E	Grand
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
A	99999	17631	5/13/2010			6/7/10	
Comments: This is well is intended to be drilled and completed as a Class II water injection well CHIN							

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
Comments:							

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
Comments:							

ACTION CODES:
- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

David L. Allin
Name (Please Print)
Signature
Permit Agent/Consultant
Title
5/19/2010
Date

RECEIVED
MAY 20 2010
DIV. OF OIL, GAS & MINING

(5/2000)

RECEIVED
MAY 2 2 2010
DIV. OF OIL, GAS & MINING

Daily Drilling Report Version 2010-05-22-12:30

Westwater Farms, LLC Harley Dome 1 Injection Well, API No. 43-019-31622

600.5' fnl and 2,139' fel (NWNE) Section 10, T19S, R25E, SLM, Greater Cisco Field, Grand County, Utah

Graded Ground Level (GL) Elevation 4,864' and Kelly Bushing (KB) Elevation 4,874'

All depths cited are drilling depths prior to open-hole logging

Submitted by David L. Allin, Well Construction Consultant to Westwater Farms, LLC

2010-05-12 Completed Propetroco, Inc. Rotary Rig 1 move in and rig-up; Westwater Farms support crew dug blooie pit.

2010-05-13 08:00 spudded well with Bit 1: 11" fixed tungsten carbide insert bit on air hammer; Possible top of Morrison Fm near 188' GL; 13:00 reached surface hole TD 218' GL circulating air; Blew hole clean; No shows of oil, gas or water; 14:00 completed TOH with Bit 1 and began to wait for cementing float collar (FC) to be delivered by Halliburton; 15:00 Halliburton dropped off FC and two centralizer stops; 15:15 Mark Wright, Grand County Engineer, on site to check on progress; 15:30 shut down for the day and Propetroco crew off location; Westwater Farms support crew dug reserve pit; TD 218' GL; SDFN

2010-05-14 08:00 strapped five joints of new (2008) 8.625" J-55 24.00 ppf casing at 217.2' plus 1.2' FC for a total surface casing string of 218.4'; 09:00 Bart Kettle, Utah DOGM Petroleum Operations Specialist, on site to observe surface casing setting and cementing ops; 09:30 PU shoe joint but had to lay back down to re-rig lifting gear under traveling block to accommodate 45' length of casing jt; **Note that Propetroco Rig 1 is designed to handle casing joints no longer than 42'**; 10:20 TIH surface casing (SC) shoe jt with FC made up and tack welded on bottom with centralizer 2' above; 10:45 TIH SC Jt 2, made up and tack welded on shoe joint top collar; 11:30 TIH SC Jt 3 with centralizer over SC Jt 2 top collar; 11:45 TIH SC Jt 4; 12:00 TIH SC Jt 5 with centralizer 10' below top collar and tagged fill near 214' GL; 12:15 landed casing at TD 218' GL by attaching Kelly rod and circulating fill out of hole with air and reciprocating the SC string to clean hole prior to cementing; No shows of oil, gas or water; 13:30 after lunch break began mixing cmt but delayed to fix minor duplex pump leaks; 14:00 completed mixing first tub of cmt containing 30 sx Portland cmt to yield 1.18 cuft/sack of 15.6 ppg, Class A slurry and total batch volume of 35.4 cuft (6.30 bbls); 14:15 completed top filling of SC/hole annulus with first tub of cement and flushed pump and hoses; 14:40 completed mixing second tub of cmt containing 30 sx; 14:45 SC/hole annulus filled up with 12 cuft cmt left in mixing tub for a grand total net cmt volume of 58.8 cuft (10.47 bbls); 15:00 built dike around casing, topped off with cmt and flushed out pump and hoses; Bart Kettle off location; 15:15 safety discussion re long string hole drilling ops; 15:30 checked cmt and no significant fall back; Propetroco crew off location; TD 218' GL; WOC; SDFWE

2010-05-15 11:45 Compiled and filed weekly ops report to DOGM; TD 218' GL; WOC; SDFWE

2010-05-16 TD 218' GL; WOC; SDFWE

2010-05-17 07:30 Propetroco crew on location; 07:45 pressure tested surface casing with rig compressor; Held 250 psi for 10 minutes without pressure loss; 08:00 disconnected Kelly rod from casing elevator crossover & cut off casing 1' above GL; 08:30 began to weld on Wellhead Inc. SOWO 8.625" casing head bowl; 08:45 hot shot service delivered Washington rotating head (WRH) and riser spools with seal rings, bolts and lubricator; 09:30 began to nipple up spools and WRH on Propetroco's 11" drilling flange; 13:00 David L. Allin (DLA) met w/Jared Lucador-Halliburton re open-hole swab testing, water sample lab analysis, open-hole logging, long string cementing & step-rate testing needs that Halliburton could help with & bid for; 15:30 Propetroco crew completed nippling up WRH, plumbing casing head, dropped off PDC drill bit & subs, fueled rig & left location; Westwater Farms (WF) support crew continued to fabricate parts to allow WRH to be connected to Propetroco's blooie line and the lower Kelly rod bushing nut to engage the WRH; TD 218' GL; SDFN

2010-05-18 07:30 Propetroco crew on location & began assembling blooie line; Telcon w/Travis Fihr-Halliburton re locating an inflatable earth packer to use to recover isolated sample of Wingate Ss water from open hole; 10:00 RIH w/Bit 2 & bit sub made up on first 6" drill collar; Bit 2: Rocky Mountain Bit 7.875" RMG M557X s/n 70324 five blade PDC; Delay to adjust rig air compressor clutch; 11:00 RIH

w/second 6" drill collar; 12:00 RIH w/all of bottom hole assembly (BHA) that would fit in the SC to 228" KB, stabbed the Kelly rod through the WRH rubber seal assembly & buttoned up WRH; 12:55 drilled through SC float collar (shoe) into upper part of Brushy Basin Mbr Morrison Fm circulating air; 13:20 encountered sandstone layers between 245' & 265' KB that were wet with no shows of oil or gas; 13:53 complete BHA composed of Bit 2, bit sub, 2 6" x 20' drill collars, 5 4.5" x 20' drill collars & 5 3.5" x 20' drill collars in hole to 270' KB; Began adding water with foaming agent to air flow to maintain circulation; 14:18 20' conn @ 290' KB **(note all depths from this point on are measured from KB)** no shows from variegated shale; 14:36 20' conn @ 310' **(note all drill pipe is composed of 20' joints)** no shows from variegated shale; 14:46 conn @ 330' no shows from variegated shale; 14:58 conn @ 350' no shows from variegated shale; 15:10 conn @ 370' no shows from variegated shale; 15:22 conn @ 390' no shows from variegated shale; 15:35 conn @ 410' no shows from variegated shale; 15:52 conn @ 430' no shows from variegated shale; 16:06 conn @ 450' no shows from variegated shale; 16:18 conn @ 470' no shows from variegated shale; 16:28 conn @ 490' no shows from variegated shale; 16:42 conn @ 510' no shows from variegated shale; 16:59 conn @ 530' no shows from variegated shale; 17:01 stopped drilling for the day after 300' run in about 4 hrs (avg 75 ft/hr); 17:08 completed TOH w/6 stds; TD 530'; SDNF

2010-05-19 07:30 Propetroco crew on location to begin rig service; 08:30 TIH 6 stds & found no significant fill; 08:50 circulated bottoms up with possible trace of gas (no flare from igniter) by building 180 psi on hole with rig compressor indicating 400' of fluid in hole (fluid level near 130' depth); 09:03 reconn @ 530' and commenced drilling; 09:16 conn @ 550' no shows from green shale; conn @ 570' no shows from green shale & fine grain ss below 565'; Top of Salt Wash Mbr Morrison Fm 565'; 09:45 telcon w/Bart Kettle-DOGM re projected schedule of proposed Entrada Ss and Wingate Ss water sampling; 09:52 conn @ 590' no shows from ss & variegated shale; 10:08 conn @ 610' no shows from variegated shale & fine grain ss; 10:24 conn @ 630' no shows from fine grain ss & variegated shale; 10:37 conn @ 650' no shows from fine grain ss & green shale; 10:55 conn @ 670' no shows from fine grain ss & green shale; 11:09 conn @ 690' no shows from ss & variegated shale; 11:33 conn @ 710' no shows from fine grain ss & variegated shale; 11:48 conn @ 730' no shows from variegated shale & fine grain ss; 12:01 conn @ 750' no shows from variegated shale; 12:19 conn @ 770' no shows from variegated shale; 12:32 conn @ 790' no shows from variegated shale & fine grain ss; 12:47 conn @ 810' no shows from variegated shale; 13:00 conn @ 830' no shows from variegated shale; 13:16 conn @ 850 no shows from variegated shale & gray ls; 13:35 conn @ 870' no shows from red brown shale; 13:50 conn @ 890' no shows from red brown shale & fine grain ss; Top of Summerville Fm 880'; 13:55 stopped drilling to repair rig motor fuel line leak; TOH 14 stds, shut down rig & began repair work; 16:15 Propetroco crew off location; Drilled 360' in about 5 hrs (avg 72 ft/hr); TD 890'; SDNF

2010-05-20 07:30 Propetroco crew on location to begin rig service & complete repair of fuel line & wiring; 09:00 lit igniter, TIH 7 stds & unloaded water in well from 520' by building 150 psi on hole with rig compressor indicating 330' of fluid above bit & fluid level near 190'; No shows; 09:15 caught water sample of overnight infill from Morrison Mbrs & Summerville Fm at TD 890' (Halliburton lab test May 22 SG at 60° F 1.013, pH 7.6, Rw 0.42 ohm-meter and calculated TDS 30,740 ppm); 09:30 TIH 7 stds, made up Kelly rod, went to bottom & found no significant fill; Unloaded lower part of well & circulated clean; No shows; 10:05 reconn @ 890'; Suspended drilling to adjust clutch on rig compressor; 10:25 commenced drilling; 10:36 conn @ 910' no shows from frosted white fine to medium grain ss; Top of Moab Tongue Mbr of Curtis Fm (Entrada Ss aquifer) at 892'; 10:40 water production increased from the background mist introduced by the rig injection pump of 2 bbls per hr to 4 or 5 bbls per hr; 10:46 conn @ 930' no shows from frosted white fine to medium grain ss; 10:57 conn @ 950' no shows from frosted white medium to fine grain ss; 11:08 conn @ 970' no shows from frosted white fine to medium grain ss; 11:17 conn @ 990' no shows from white to pink fine grain ss; Top of Slickrock Mbr Entrada Ss 975'; 11:22 collected water sample from 1000' (Halliburton lab test May 22 SG at 60° F 1.013, pH 7.6, Rw 0.41 ohm-meter and calculated TDS 36,186 ppm); 11:29 conn @ 1010' no shows from white & light red fine grain ss; 11:40 conn @ 1030' no shows from white & pink fine grain ss; 11:53 conn @ 1050' no shows from white & pink fine grain ss; 12:02 conn @ 1070' no shows from pink fine grain ss; 12:15 conn @ 1090' no shows from pink fine grain ss; 12:26 conn @ 1110' no shows from pink to red fine grain ss; 12:37 conn @ 1130' no shows from pink to red fine grain ss; 12:40 collected water sample from 1140' (Halliburton lab test May 22 SG at 60° F 1.012, pH

7.4, Rw 0.44 ohm-meter and calculated TDS 26,060 ppm); 12:49 conn @ 1150' no shows from red brown fine grain ss; Top of Kayenta Fm 1150'; 13:01 conn @ 1170' no shows from maroon to red medium grain low porosity ss; 13:17 conn @ 1190' no shows from maroon & white medium grain low porosity ss; 13:42 conn @ 1210' no shows from variegated medium grain low porosity ss; 14:02 conn @ 1230' no shows from variegated medium to fine grain low porosity ss; 14:23 conn @ 1250' no shows from white & maroon medium to fine grain low porosity ss; 14:45 conn @ 1270' no shows from white & maroon medium to fine grain low porosity ss; 15:12 conn @ 1290' missed sample due to discussion w/Halliburton rep & delivery of 3 water samples to be analyzed by Halliburton lab in Grand Junction; 15:36 conn @ 1310' no shows from maroon, green & white fine grain low porosity ss; 15:55 conn @ 1330' no shows from variegated fine grain low porosity ss; Significant water production increase to 8 bbls per hr and drilling break in last 5' from salmon fine grain porous ss; Top of Wingate Ss 1325'; 16:00 stopped drilling to allow well to fill with water and set up to unload and drill out to TD on May 21; TOH 26½ stds; 16:45 Propetroco crew off location; Drilled 440' in about 5 hrs (avg 80 ft/hr); TD 1330'; SDNF

2010-05-21 07:30 Propetroco crew on location to begin rig service; 08:45 lit igniter, TIH 12 stds & unloaded water in well from 720' by building 140 psi on hole with rig compressor indicating 310' of fluid above bit & fluid level near 410'; No shows; 09:15 TIH remaining stds plus single jt, made up Kelly rod, went to bottom & found 2' fill; Unloaded lower part of well & circulated clean; No shows; 09:25 caught water sample of overnight infill from Morrison Mbrs, Summerville Fm, Entrada Ss, Kayenta Fm & top few feet of Wingate Ss (Halliburton lab test May 22 SG at 60° F 1.020, pH 7.5, Rw 0.34 ohm-meter and calculated TDS 35,220 ppm); 19:35 reconn @ 1330' & commenced drilling; 10:01 conn @ 1350' no shows from variegated shale & salmon fine grain porous ss below 1340'; 10:16 conn @ 1370' no shows from salmon fine grain porous ss; 10:25 conn @ 1390' no shows from salmon fine grain porous ss; 10:41 conn @ 1410' no shows from salmon fine grain porous ss; 10:53 conn @ 1430' no shows from salmon fine grain porous ss; Water production increased from the 4 or 5 bbls per hr of previous day to 30 to 40 bbls per hr (720 to 960 bbls per day); 11:10 conn @ 1450' no shows from salmon fine grain porous ss; 11:26 conn @ 1470' no shows from salmon & less porous maroon fine grain ss; 11:40 conn @ 1490' no shows from salmon fine grain porous ss; 11:58 conn @ 1510' no shows from salmon fine grain porous ss; 12:20 conn @ 1530' no shows from salmon fine grain porous ss; 12:41 conn @ 1550' no shows from salmon & less porous maroon fine grain ss; 12:56 conn @ 1570' no shows from less porous maroon & salmon fine grain ss; 13:15 conn @ 1590' no shows from low porosity maroon fine grain ss & shale; 13:35 conn @ 1610' no shows from salmon & less porous maroon fine grain ss; 13:50 conn @ 1630' no shows from less porous maroon & salmon fine grain ss; 14:11 conn @ 1650' no shows from low porosity maroon fine grain ss & shale; 14:36 conn @ 1670' no shows from low porosity maroon fine grain ss & shale; 14:55 conn @ 1690' no shows from low porosity salmon & maroon fine grain ss & shale & dark red shale in lower 2'; Top of Chinle Fm 1688'; 15:16 conn @ 1710' no shows from maroon, dark red & green shale; 15:25 caught water sample while drilling 1705-15' in Chinle Fm (Halliburton lab test May 22 SG at 60° F 1.014, pH 7.6, Rw 0.38 ohm-meter and calculated TDS 52,763 ppm); Resistivity of water sample was 0.366 ohm-meters at 80° F similar to the resistivity of a 15,000 ppm pure NaCl solution; 15:30 reached TD @ 1730' no shows from dark red shale; 15:54 circulated hole clean & began TOH in preparation for logging on May 22; 17:30 Propetroco crew off location; Drilled 400' in about 6 hrs (avg 67 ft/hr); TD 1730'; SDNF

HALLIBURTON

Halliburton Energy Services
The Rockies NWA Regional Laboratory
Grand Junction, CO 970) 523-3692

Water Analysis Report

Contact Information

Company	West Water Farm	Date Received	5-20/21-10
Reported To	Davis Allin	Date Tested	May 22, 2010
Reported By	Ann Ekx	Tested By	Ann Ekx

Sample Physical Characteristics

Well Name	HD1		Temperature	69	°F
Location	Upper Jes		pH	7.6	
Specific Gravity	1.011		Color	Clear	
Corrected SG	1.013	at 60°F	Turbidity	None	
TDS (calculated)	36186	ppm	Resistivity	0.41	Ω·m

Sample Chemical Characteristics

Anions	Chloride	22400	mg/L	**Cations**	Total Iron	0.8	mg/L
	Sulfate	0	mg/L		Ferrous Iron	0.6	mg/L
	Bicarbonate	600	mg/L		Potassium	14	mg/L
	Carbonate	0	mg/L		Calcium	700	mg/L
	Hydroxide		mg/L		Magnesium	1200	mg/L
					Sodium (calculated)	11669	mg/L

General Comments

W175; 11:22 5-20-10 1000'

HALLIBURTON

Halliburton Energy Services
The Rockies NWA Regional Laboratory
Grand Junction, CO 970) 523-3692

Water Analysis Report

Contact Information

Company	West Water Farm	Date Received	5-20/21-10
Reported To	Davis Allin	Date Tested	May 22, 2010
Reported By	Ann Ekx	Tested By	Ann Ekx

Sample Physical Characteristics

Well Name	HD1		Temperature	70	°F
Location	Lwr Jes		pH	7.4	
Specific Gravity	1.010		Color	Cloudy Pink	
Corrected SG	1.012	at 60°F	Turbidity	Severe	
TDS (calculated)	26060	ppm	Resistivity	0.44	Ω·m

Sample Chemical Characteristics

Anions	Chloride	16600	mg/L	**Cations**	Total Iron	1.4	mg/L
	Sulfate	280	mg/L		Ferrous Iron	1.0	mg/L
	Bicarbonate	280	mg/L		Potassium	387	mg/L
	Carbonate	0	mg/L		Calcium	900	mg/L
	Hydroxide		mg/L		Magnesium	2100	mg/L
					Sodium (calculated)	5771	mg/L

General Comments

W176; 5-20-10, 12:40 1140'

HALLIBURTON

Halliburton Energy Services
The Rockies NWA Regional Laboratory
Grand Junction, CO 970) 523-3692

Water Analysis Report

Contact Information

Company	West Water Farm	Date Received	5-20/21-10
Reported To	Davis Allin	Date Tested	May 22, 2010
Reported By	Ann Ekx	Tested By	Ann Ekx

Sample Physical Characteristics

Well Name	HD1	Temperature	70 °F
Location	JsJm	pH	7.6
Specific Gravity	1.011	Color	:loudy White
Corrected SG	1.013 at 60°F	Turbidity	Severe
TDS (calculated)	30740 ppm	Resistivity	0.42 Ω·m

Sample Chemical Characteristics

Anions	Chloride	19000	mg/L	**Cations**	Total Iron	2.8 mg/L
	Sulfate	400	mg/L		Ferrous Iron	1.8 mg/L
	Bicarbonate	390	mg/L		Potassium	55 mg/L
	Carbonate	0	mg/L		Calcium	1000 mg/L
	Hydroxide		mg/L		Magnesium	1400 mg/L
					Sodium (calculated)	8828 mg/L

General Comments

W177; 5-20-10, 9:15 Overnight fill

HALLIBURTON

Halliburton Energy Services
The Rockies NWA Regional Laboratory
Grand Junction, CO 970) 523-3692

Water Analysis Report

Contact Information

Company	West Water Farm	Date Received	5-20/21-10
Reported To	Davis Allin	Date Tested	May 22, 2010
Reported By	Ann Ekx	Tested By	Ann Ekx

Sample Physical Characteristics

Well Name	HD1	Temperature	71 °F
Location	Jmthm	pH	7.5
Specific Gravity	1.018	Color	Lt Yellow
Corrected SG	1.020 at 60°F	Turbidity	None
TDS (calculated)	35220 ppm	Resistivity	0.34 Ω·m

Sample Chemical Characteristics

Anions	Chloride	22000	mg/L	**Cations**	Total Iron	1.6 mg/L
	Sulfate	400	mg/L		Ferrous Iron	0.2 mg/L
	Bicarbonate	380	mg/L		Potassium	0 mg/L
	Carbonate	0	mg/L		Calcium	1400 mg/L
	Hydroxide		mg/L		Magnesium	1500 mg/L
					Sodium (calculated)	10155 mg/L

General Comments

W180; 5-21-10 5' into top Jes 9:25

HALLIBURTON

Halliburton Energy Services
The Rockies NWA Regional Laboratory
Grand Junction, CO 970) 523-3692

Water Analysis Report

Contact Information

Company	West Water Farm	Date Received	5-20/21-10
Reported To	Davis Allin	Date Tested	May 22, 2010
Reported By	Ann Ekx	Tested By	Ann Ekx

Sample Physical Characteristics

Well Name	HD1		Temperature	71 °F
Location	TAC 1720		pH	7.6
Specific Gravity	1.012		Color	Orange
Corrected SG	1.014	at 60°F	Turbidity	None
TDS (calculated)	52763	ppm	Resistivity	0.38 Ω·m

Sample Chemical Characteristics

Anions	Chloride	32600 mg/L	**Cations**	Total Iron	0.2 mg/L
	Sulfate	360 mg/L		Ferrous Iron	0.6 mg/L
	Bicarbonate	290 mg/L		Potassium	510 mg/L
	Carbonate	0 mg/L		Calcium	1600 mg/L
	Hydroxide	mg/L		Magnesium	1400 mg/L
				Sodium (calculated)	16635 mg/L

General Comments

W181; TAC 1720 Contains foamer 15:25 5-21-10

Daily Drilling Report Version 2010-05-23-12:00
Westwater Farms, LLC Harley Dome 1 Injection Well, API No. 43-019-31622
600.5' fnl and 2,139' fel (NWNE) Section 10, T19S, R25E, SLM, Greater Cisco Field, Grand County, Utah
Graded Ground Level (GL) Elevation 4,864' and Kelly Bushing (KB) Elevation 4,874'
All depths cited are drilling depths prior to open-hole logging
Submitted by David L. Allin, Well Construction Consultant to Westwater Farms, LLC

2010-05-12 Completed Propetroco, Inc. Rotary Rig 1 move in and rig-up; Westwater Farms support crew dug blooie pit.

2010-05-13 08:00 spudded well with Bit 1: 11" fixed tungsten carbide insert bit on air hammer; Possible top of Morrison Fm near 188' GL; 13:00 reached surface hole TD 218' GL circulating air; Blew hole clean; No shows of oil, gas or water; 14:00 completed TOH with Bit 1 and began to wait for cementing float collar (FC) to be delivered by Halliburton; 15:00 Halliburton dropped off FC and two centralizer stops; 15:15 Mark Wright, Grand County Engineer, on site to check on progress; 15:30 shut down for the day and Propetroco crew off location; Westwater Farms support crew dug reserve pit; TD 218' GL; SDFN

2010-05-14 08:00 strapped five joints of new (2008) 8.625" J-55 24.00 ppf casing at 217.2' plus 1.2' FC for a total surface casing string of 218.4'; 09:00 Bart Kettle, Utah DOGM Petroleum Operations Specialist, on site to observe surface casing setting and cementing ops; 09:30 PU shoe joint but had to lay back down to re-rig lifting gear under traveling block to accommodate 45' length of casing jt; **Note that Propetroco Rig 1 is designed to handle casing joints no longer than 42';** 10:20 TIH surface casing (SC) shoe jt with FC made up and tack welded on bottom with centralizer 2' above; 10:45 TIH SC Jt 2, made up and tack welded on shoe joint top collar; 11:30 TIH SC Jt 3 with centralizer over SC Jt 2 top collar; 11:45 TIH SC Jt 4; 12:00 TIH SC Jt 5 with centralizer 10' below top collar and tagged fill near 214' GL; 12:15 landed casing at TD 218' GL by attaching Kelly rod and circulating fill out of hole with air and reciprocating the SC string to clean hole prior to cementing; No shows of oil, gas or water; 13:30 after lunch break began mixing cmt but delayed to fix minor duplex pump leaks; 14:00 completed mixing first tub of cmt containing 30 sx Portland cmt to yield 1.18 cuft/sack of 15.6 ppg, Class A slurry and total batch volume of 35.4 cuft (6.30 bbls); 14:15 completed top filling of SC/hole annulus with first tub of cement and flushed pump and hoses; 14:40 completed mixing second tub of cmt containing 30 sx; 14:45 SC/hole annulus filled up with 12 cuft cmt left in mixing tub for a grand total net cmt volume of 58.8 cuft (10.47 bbls); 15:00 built dike around casing, topped off with cmt and flushed out pump and hoses; Bart Kettle off location; 15:15 safety discussion re long string hole drilling ops; 15:30 checked cmt and no significant fall back; Propetroco crew off location; TD 218' GL; WOC; SDFWE

2010-05-15 11:45 Compiled and filed weekly ops report to DOGM; TD 218' GL; WOC; SDFWE

2010-05-16 TD 218' GL; WOC; SDFWE

2010-05-17 07:30 Propetroco crew on location; 07:45 pressure tested surface casing with rig compressor; Held 250 psi for 10 minutes without pressure loss; 08:00 disconnected Kelly rod from casing elevator crossover & cut off casing 1' above GL; 08:30 began to weld on Wellhead Inc. SOWO 8.625" casing head bowl; 08:45 hot shot service delivered Washington rotating head (WRH) and riser spools with seal rings, bolts and lubricator; 09:30 began to nipple up spools and WRH on Propetroco's 11" drilling flange; 13:00 David L. Allin (DLA) met w/Jared Lucador-Halliburton re open-hole swab testing, water sample lab analysis, open-hole logging, long string cementing & step-rate testing needs that Halliburton could help with & bid for; 15:30 Propetroco crew completed nippling up WRH, plumbing casing head, dropped off PDC drill bit & subs, fueled rig & left location; Westwater Farms (WF) support crew continued to fabricate parts to allow WRH to be connected to Propetroco's blooie line and the lower Kelly rod bushing nut to engage the WRH; TD 218' GL; SDFN

2010-05-18 07:30 Propetroco crew on location & began assembling blooie line; Telcon w/Travis Fihr-Halliburton re locating an inflatable earth packer to use to recover isolated sample of Wingate Ss water from open hole; 10:00 RIH w/Bit 2 & bit sub made up on first 6" drill collar; Bit 2: Rocky Mountain Bit 7.875"

RMG M557X s/n 70324 five blade PDC; Delay to adjust rig air compressor clutch; 11:00 RIH w/second 6" drill collar; 12:00 RIH w/all of bottom hole assembly (BHA) that would fit in the SC to 228" KB, stabbed the Kelly rod through the WRH rubber seal assembly & buttoned up WRH; 12:55 drilled through SC float collar (shoe) into upper part of Brushy Basin Mbr Morrison Fm circulating air; 13:20 encountered sandstone layers between 245' & 265' KB that were wet with no shows of oil or gas; 13:53 complete BHA composed of Bit 2, bit sub, 2 6" x 20' drill collars, 5 4.5" x 20' drill collars & 5 3.5" x 20' drill collars in hole to 270' KB; Began adding water with foaming agent to air flow to maintain circulation; 14:18 20' conn @ 290' KB **(note all depths from this point on are measured from KB)** no shows from variegated shale; 14:36 20' conn @ 310' **(note all drill pipe is composed of 20' joints)** no shows from variegated shale; 14:46 conn @ 330' no shows from variegated shale; 14:58 conn @ 350' no shows from variegated shale; 15:10 conn @ 370' no shows from variegated shale; 15:22 conn @ 390' no shows from variegated shale; 15:35 conn @ 410' no shows from variegated shale; 15:52 conn @ 430' no shows from variegated shale; 16:06 conn @ 450' no shows from variegated shale; 16:18 conn @ 470' no shows from variegated shale; 16:28 conn @ 490' no shows from variegated shale; 16:42 conn @ 510' no shows from variegated shale; 16:59 conn @ 530' no shows from variegated shale; 17:01 stopped drilling for the day after 300' run in about 4 hrs (avg 75 ft/hr); 17:08 completed TOH w/6 stds; TD 530'; SDFN

2010-05-19 07:30 Propetroco crew on location to begin rig service; 08:30 TIH 6 stds & found no significant fill; 08:50 circulated bottoms up with possible trace of gas (no flare from igniter) by building 180 psi on hole with rig compressor indicating 400' of fluid in hole (fluid level near 130' depth); 09:03 reconn @ 530' and commenced drilling; 09:16 conn @ 550' no shows from green shale; conn @ 570' no shows from green shale & fine grain ss below 565'; Top of Salt Wash Mbr Morrison Fm 565'; 09:45 telcon w/Bart Kettle-DOGM re projected schedule of proposed Entrada Ss and Wingate Ss water sampling; 09:52 conn @ 590' no shows from ss & variegated shale; 10:08 conn @ 610' no shows from variegated shale & fine grain ss; 10:24 conn @ 630' no shows from fine grain ss & variegated shale; 10:37 conn @ 650' no shows from fine grain ss & green shale; 10:55 conn @ 670' no shows from fine grain ss & green shale; 11:09 conn @ 690' no shows from ss & variegated shale; 11:33 conn @ 710' no shows from fine grain ss & variegated shale; 11:48 conn @ 730' no shows from variegated shale & fine grain ss; 12:01 conn @ 750' no shows from variegated shale; 12:19 conn @ 770' no shows from variegated shale; 12:32 conn @ 790' no shows from variegated shale & fine grain ss; 12:47 conn @ 810' no shows from variegated shale; 13:00 conn @ 830' no shows from variegated shale; 13:16 conn @ 850 no shows from variegated shale & gray ls; 13:35 conn @ 870' no shows from red brown shale; 13:50 conn @ 890' no shows from red brown shale & fine grain ss; Top of Summerville Fm 880'; 13:55 stopped drilling to repair rig motor fuel line leak; TOH 14 stds, shut down rig & began repair work; 16:15 Propetroco crew off location; Drilled 360' in about 5 hrs (avg 72 ft/hr); TD 890'; SDFN

2010-05-20 07:30 Propetroco crew on location to begin rig service & complete repair of fuel line & wiring; 09:00 lit igniter, TIH 7 stds & unloaded water in well from 520' by building 150 psi on hole with rig compressor indicating 330' of fluid above bit & fluid level near 190'; No shows; 09:15 caught water sample of overnight infill from Morrison Mbrs & Summerville Fm at TD 890' (Halliburton lab test May 22 SG at 60° F 1.013, pH 7.6, Rw 0.42 ohm-meter and calculated TDS 30,740 ppm); 09:30 TIH 7 stds, made up Kelly rod, went to bottom & found no significant fill; Unloaded lower part of well & circulated clean; No shows; 10:05 reconn @ 890'; Suspended drilling to adjust clutch on rig compressor; 10:25 commenced drilling; 10:36 conn @ 910' no shows from frosted white fine to medium grain ss; Top of Moab Tongue Mbr of Curtis Fm (Entrada Ss aquifer) at 892'; 10:40 water production increased from the background mist introduced by the rig injection pump of 2 bbls per hr to 4 or 5 bbls per hr; 10:46 conn @ 930' no shows from frosted white fine to medium grain ss; 10:57 conn @ 950' no shows from frosted white medium to fine grain ss; 11:08 conn @ 970' no shows from frosted white fine to medium grain ss; 11:17 conn @ 990' no shows from white to pink fine grain ss; Top of Slickrock Mbr Entrada Ss 975'; 11:22 collected water sample from 1000' (Halliburton lab test May 22 SG at 60° F 1.013, pH 7.6, Rw 0.41 ohm-meter and calculated TDS 36,186 ppm); 11:29 conn @ 1010' no shows from white & light red fine grain ss; 11:40 conn @ 1030' no shows from white & pink fine grain ss; 11:53 conn @ 1050' no shows from white & pink fine grain ss; 12:02 conn @ 1070' no shows from pink fine grain ss; 12:15 conn @ 1090' no shows from pink fine grain ss; 12:26 conn @

1110' no shows from pink to red fine grain ss; 12:37 conn @ 1130' no shows from pink to red fine grain ss; 12:40 collected water sample from 1140' (Halliburton lab test May 22 SG at 60° F 1.012, pH 7.4, Rw 0.44 ohm-meter and calculated TDS 26,060 ppm); 12:49 conn @ 1150' no shows from red brown fine grain ss; Top of Kayenta Fm 1150'; 13:01 conn @ 1170' no shows from maroon to red medium grain low porosity ss; 13:17 conn @ 1190' no shows from maroon & white medium grain low porosity ss; 13:42 conn @ 1210' no shows from variegated medium grain low porosity ss; 14:02 conn @ 1230' no shows from variegated medium to fine grain low porosity ss; 14:23 conn @ 1250' no shows from white & maroon medium to fine grain low porosity ss; 14:45 conn @ 1270' no shows from white & maroon medium to fine grain low porosity ss; 15:12 conn @ 1290' missed sample due to discussion w/Halliburton rep & delivery of 3 water samples to be analyzed by Halliburton lab in Grand Junction; 15:36 conn @ 1310' no shows from maroon, green & white fine grain low porosity ss; 15:55 conn @ 1330' no shows from variegated fine grain low porosity ss; Significant water production increase to 8 bbls per hr and drilling break in last 5' from salmon fine grain porous ss; Top of Wingate Ss 1325'; 16:00 stopped drilling to allow well to fill with water and set up to unload and drill out to TD on May 21; TOH 26½ stds; 16:45 Propetroco crew off location; Drilled 440' in about 5 hrs (avg 80 ft/hr); TD 1330'; SDFN

2010-05-21 07:30 Propetroco crew on location to begin rig service; 08:45 lit igniter, TIH 12 stds & unloaded water in well from 720' by building 140 psi on hole with rig compressor indicating 310' of fluid above bit & fluid level near 410'; No shows; 09:15 TIH remaining stds plus single jt, made up Kelly rod, went to bottom & found 2' fill; Unloaded lower part of well & circulated clean; No shows; 09:25 caught water sample of overnight infill from Morrison Mbrs, Summerville Fm, Entrada Ss, Kayenta Fm & top few feet of Wingate Ss (Halliburton lab test May 22 SG at 60° F 1.020, pH 7.5, Rw 0.34 ohm-meter and calculated TDS 35,220 ppm); 19:35 reconn @ 1330' & commenced drilling; 10:01 conn @ 1350' no shows from variegated shale & salmon fine grain porous ss below 1340'; 10:16 conn @ 1370' no shows from salmon fine grain porous ss; 10:25 conn @ 1390' no shows from salmon fine grain porous ss; 10:41 conn @ 1410' no shows from salmon fine grain porous ss; 10:53 conn @ 1430' no shows from salmon fine grain porous ss; Water production increased from the 4 or 5 bbls per hr of previous day to 30 to 40 bbls per hr (720 to 960 bbls per day); 11:10 conn @ 1450' no shows from salmon fine grain porous ss; 11:26 conn @ 1470' no shows from salmon & less porous maroon fine grain ss; 11:40 conn @ 1490' no shows from salmon fine grain porous ss; 11:58 conn @ 1510' no shows from salmon fine grain porous ss; 12:20 conn @ 1530' no shows from salmon fine grain porous ss; 12:41 conn @ 1550' no shows from salmon & less porous maroon fine grain ss; 12:56 conn @ 1570' no shows from less porous maroon & salmon fine grain ss; 13:15 conn @ 1590' no shows from low porosity maroon fine grain ss & shale; 13:35 conn @ 1610' no shows from salmon & less porous maroon fine grain ss; 13:50 conn @ 1630' no shows from less porous maroon & salmon fine grain ss; 14:11 conn @ 1650' no shows from low porosity maroon fine grain ss & shale; 14:36 conn @ 1670' no shows from low porosity maroon fine grain ss & shale; 14:55 conn @ 1690' no shows from low porosity salmon & maroon fine grain ss & shale & dark red shale in lower 2'; Top of Chinle Fm 1688'; 15:16 conn @ 1710' no shows from maroon, dark red & green shale; 15:25 caught water sample while drilling 1705-15' in Chinle Fm (Halliburton lab test May 22 SG at 60° F 1.014, pH 7.6, Rw 0.38 ohm-meter and calculated TDS 52,763 ppm); Resistivity of water sample was 0.366 ohm-meters at 80° F similar to the resistivity of a 15,000 ppm pure NaCl solution; 15:30 reached TD @ 1730' no shows from dark red shale; 15:54 circulated hole clean & began TOH in preparation for logging on May 22; 17:30 Propetroco crew off location; Drilled 400' in about 6 hrs (avg 67 ft/hr); TD 1730'; SDFN

2010-05-22 18:00 Propetroco owner/driller Terry Leach on location to assist open hole logging operations by Halliburton; 19:30 Halliburton logging crew on site; Rigged up tools with minor problems due to shifted stds of racked drill pipe & collars in derrick; 20:30 measured 3' of fill in well with logging tools; 21:16 began logging triple combination True Resistivity, Spectral Density and Dual Spaced Neutron logs in formation water; 23:00 Halliburton tools laid down and Propetroco owner/driller off location; 23:30 Halliburton delivered 8 sets of triple logs and 6 sets of Borehole Volume Plot to Dave Allin and Tom Warnes plus digital files to Halliburton long string cementers & Dave Allin; TD 1730'; SDFWE

2010-05-23 01:00 Halliburton off location; 08:15 arrangements for open hole swab testing cancelled in favor of

running & cementing long string casing due to verification of brine water in the Wingate Ss proposed injection interval; Open hole log tops depths and elevations measured from 4874' KB elevation:

Dakota Sandstone (Kd)	11'	+4863'
Cedar Mountain Fm (Kcm [K-1])	109'	+4765'
Morrison Fm		
Brushy Basin Member (Jmbb [K-0])	180'	+4694'
Salt Wash Member (Jmsw)	552'	+4322'
Tidwell Member (Jmt)	826'	+4048'
Summerville Fm (Js [J-5])	850'	+4024'
Curtis Fm		
Moab Tongue Member (Jctm)	885'	+3989'
Entrada Sandstone		
Slick Rock Member (Jes [J-3])	992'	+3882'
Kayenta Fm (Jk [J-2])	1143'	+3731'
Wingate Sandstone (Jw)	1342'	+3532'
Chinle Fm (Trc [J-0])	1679'	+3195'

The static fluid level logged in the well was 525'; Formation water resistivity (Rw) calculations made from the open hole logs for a representative layer of the Entrada Ss aquifer in the Jctm 962-66' with 26% porosity & 3 ohm-meters deep resistivity at 81° F estimated formation temperature indicated an equivalent pure NaCl solution of 23,000 ppm; Rw calculations made from the open hole logs for a representative layer of the upper Wingate Ss aquifer (part of the proposed injection interval) 1346-94' with 22% porosity & 4 ohm-meters deep resistivity at 81° F estimated formation temperature indicated an equivalent pure NaCl solution of 22,500 ppm; These calculations conformed favorably with the analyses of water samples collected while drilling and from overnight fill up reported earlier. TD 1730' SDFWE

RECEIVED
JUN 0 8 2010
DIV. OF OIL, GAS & MINING

Daily Drilling/Completion Report Version 2010-06-08-12:00
Westwater Farms, LLC Harley Dome 1 Injection Well, API No. 43-019-31622
600.5' fnl and 2,139' fel (NWNE) Section 10, T19S, R25E, SLM, Greater Cisco Field, Grand County, Utah
Graded Ground Level (GL and Permanent Datum) Elevation 4,864' and Kelly Bushing (KB) Elevation 4,874'
All depths cited are drilling depths prior to open-hole logging
Submitted by David L. Allin, Well Construction Consultant to Westwater Farms, LLC

2010-05-12 Completed Propetroco, Inc. Rotary Rig 1 move in and rig-up; Westwater Farms support crew dug blooie pit.

2010-05-13 08:00 spudded well with Bit 1: 11" fixed tungsten carbide insert bit on air hammer; Possible top of Morrison Fm near 188' GL; 13:00 reached surface hole TD 218' GL circulating air; Blew hole clean; No shows of oil, gas or water; 14:00 completed TOH with Bit 1 and began to wait for cementing float collar (FC) to be delivered by Halliburton; 15:00 Halliburton dropped off FC and two centralizer stops; 15:15 Mark Wright, Grand County Engineer, on site to check on progress; 15:30 shut down for the day and Propetroco crew off location; Westwater Farms support crew dug reserve pit; TD 218' GL; SDFN

2010-05-14 08:00 strapped five joints of new (2008) 8.625" J-55 24.00 ppf casing at 217.2' plus 1.2' FC for a total surface casing string of 218.4'; 09:00 Bart Kettle, Utah DOGM Petroleum Operations Specialist, on site to observe surface casing setting and cementing ops; 09:30 PU shoe joint but had to lay back down to re-rig lifting gear under traveling block to accommodate 45' length of casing jt; **Note that Propetroco Rig 1 is designed to handle casing joints no longer than 42';** 10:20 TIH surface casing (SC) shoe jt with FC made up and tack welded on bottom with centralizer 2' above; 10:45 TIH SC Jt 2, made up and tack welded on shoe joint top collar; 11:30 TIH SC Jt 3 with centralizer over SC Jt 2 top collar; 11:45 TIH SC Jt 4; 12:00 TIH SC Jt 5 with centralizer 10' below top collar and tagged fill near 214' GL; 12:15 landed casing at TD 218' GL by attaching Kelly rod and circulating fill out of hole with air and reciprocating the SC string to clean hole prior to cementing; No shows of oil, gas or water; 13:30 after lunch break began mixing cmt but delayed to fix minor duplex pump leaks; 14:00 completed mixing first tub of cmt containing 30 sx Portland cmt to yield 1.18 cuft/sack of 15.6 ppg, Class A slurry and total batch volume of 35.4 cuft (6.30 bbls); 14:15 completed top filling of SC/hole annulus with first tub of cement and flushed pump and hoses; 14:40 completed mixing second tub of cmt containing 30 sx; 14:45 SC/hole annulus filled up with 12 cuft cmt left in mixing tub for a grand total net cmt volume of 58.8 cuft (10.47 bbls); 15:00 built dike around casing, topped off with cmt and flushed out pump and hoses; Bart Kettle off location; 15:15 safety discussion re long string hole drilling ops; 15:30 checked cmt and no significant fall back; Propetroco crew off location; TD 218' GL; WOC; SDFWE

2010-05-15 11:45 Compiled and filed weekly ops report to DOGM; TD 218' GL; WOC; SDFWE

2010-05-16 TD 218' GL; WOC; SDFWE

2010-05-17 07:30 Propetroco crew on location; 07:45 pressure tested surface casing with rig compressor; Held 250 psi for 10 minutes without pressure loss; 08:00 disconnected Kelly rod from casing elevator crossover & cut off casing 1' above GL; 08:30 began to weld on Wellhead Inc. SOWO 8.625" casing head bowl; 08:45 hot shot service delivered Washington rotating head (WRH) and riser spools with seal rings, bolts and lubricator; 09:30 began to nipple up spools and WRH on Propetroco's 11" drilling flange; 13:00 David L. Allin (DLA) met w/Jared Lucador-Halliburton re open-hole swab testing, water sample lab analysis, open-hole logging, long string cementing & step-rate testing needs that Halliburton could help with & bid for; 15:30 Propetroco crew completed nippling up WRH, plumbing casing head, dropped off PDC drill bit & subs, fueled rig & left location; Westwater Farms (WF) support crew continued to fabricate parts to allow WRH to be connected to Propetroco's blooie line and the lower Kelly rod bushing nut to engage the WRH; TD 218' GL; SDFN

2010-05-18 07:30 Propetroco crew on location & began assembling blooie line; Telcon w/Travis Fihr-Halliburton re locating an inflatable earth packer to use to recover isolated sample of Wingate Ss water from open hole; 10:00 RIH w/Bit 2 & bit sub made up on first 6" drill collar; Bit 2: Rocky Mountain Bit 7.875"

RMG M557X s/n 70324 five blade PDC; Delay to adjust rig air compressor clutch; 11:00 RIH w/second 6" drill collar; 12:00 RIH w/all of bottom hole assembly (BHA) that would fit in the SC to 228" KB, stabbed the Kelly rod through the WRH rubber seal assembly & buttoned up WRH; 12:55 drilled through SC float collar (shoe) into upper part of Brushy Basin Mbr Morrison Fm circulating air; 13:20 encountered sandstone layers between 245' & 265' KB that were wet with no shows of oil or gas; 13:53 complete BHA composed of Bit 2, bit sub, 2 6" x 20' drill collars, 5 4.5" x 20' drill collars & 5 3.5" x 20' drill collars in hole to 270' KB; Began adding water with foaming agent to air flow to maintain circulation; 14:18 20' conn @ 290' KB (**note all depths from this point on are measured from KB**) no shows from variegated shale; 14:36 20' conn @ 310' (**note all drill pipe is composed of 20' joints**) no shows from variegated shale; 14:46 conn @ 330' no shows from variegated shale; 14:58 conn @ 350' no shows from variegated shale; 15:10 conn @ 370' no shows from variegated shale; 15:22 conn @ 390' no shows from variegated shale; 15:35 conn @ 410' no shows from variegated shale; 15:52 conn @ 430' no shows from variegated shale; 16:06 conn @ 450' no shows from variegated shale; 16:18 conn @ 470' no shows from variegated shale; 16:28 conn @ 490' no shows from variegated shale; 16:42 conn @ 510' no shows from variegated shale; 16:59 conn @ 530' no shows from variegated shale; 17:01 stopped drilling for the day after 300' run in about 4 hrs (avg 75 ft/hr); 17:08 completed TOH w/6 stds; TD 530'; SDFN

2010-05-19 07:30 Propetroco crew on location to begin rig service; 08:30 TIH 6 stds & found no significant fill; 08:50 circulated bottoms up with possible trace of gas (no flare from igniter) by building 180 psi on hole with rig compressor indicating 400' of fluid in hole (fluid level near 130' depth); 09:03 reconn @ 530' and commenced drilling; 09:16 conn @ 550' no shows from green shale; conn @ 570' no shows from green shale & fine grain ss below 565'; Top of Salt Wash Mbr Morrison Fm 565'; 09:45 telcon w/Bart Kettle-DOGM re projected schedule of proposed Entrada Ss and Wingate Ss water sampling; 09:52 conn @ 590' no shows from ss & variegated shale; 10:08 conn @ 610' no shows from variegated shale & fine grain ss; 10:24 conn @ 630' no shows from fine grain ss & variegated shale; 10:37 conn @ 650' no shows from fine grain ss & green shale; 10:55 conn @ 670' no shows from fine grain ss & green shale; 11:09 conn @ 690' no shows from ss & variegated shale; 11:33 conn @ 710' no shows from fine grain ss & variegated shale; 11:48 conn @ 730' no shows from variegated shale & fine grain ss; 12:01 conn @ 750' no shows from variegated shale; 12:19 conn @ 770' no shows from variegated shale; 12:32 conn @ 790' no shows from variegated shale & fine grain ss; 12:47 conn @ 810' no shows from variegated shale; 13:00 conn @ 830' no shows from variegated shale; 13:16 conn @ 850 no shows from variegated shale & gray ls; 13:35 conn @ 870' no shows from red brown shale; 13:50 conn @ 890' no shows from red brown shale & fine grain ss; Top of Summerville Fm 880'; 13:55 stopped drilling to repair rig motor fuel line leak; TOH 14 stds, shut down rig & began repair work; 16:15 Propetroco crew off location; Drilled 360' in about 5 hrs (avg 72 ft/hr); TD 890'; SDFN

2010-05-20 07:30 Propetroco crew on location to begin rig service & complete repair of fuel line & wiring; 09:00 lit igniter, TIH 7 stds & unloaded water in well from 520' by building 150 psi on hole with rig compressor indicating 330' of fluid above bit & fluid level near 190'; No shows; **09:15 caught water sample of overnight infill from Morrison Mbrs & Summerville Fm at TD 890' (Halliburton lab test May 22 SG at 60° F 1.013, pH 7.6, Rw 0.42 ohm-meter and calculated TDS 30,740 ppm);** 09:30 TIH 7 stds, made up Kelly rod, went to bottom & found no significant fill; Unloaded lower part of well & circulated clean; No shows; 10:05 reconn @ 890'; Suspended drilling to adjust clutch on rig compressor; 10:25 commenced drilling; 10:36 conn @ 910' no shows from frosted white fine to medium grain ss; Top of Moab Tongue Mbr of Curtis Fm (Entrada Ss aquifer) at 892'; 10:40 water production increased from the background mist introduced by the rig injection pump of 2 bbls per hr to 4 or 5 bbls per hr; 10:46 conn @ 930' no shows from frosted white fine to medium grain ss; 10:57 conn @ 950' no shows from frosted white medium to fine grain ss; 11:08 conn @ 970' no shows from frosted white fine to medium grain ss; 11:17 conn @ 990' no shows from white to pink fine grain ss; Top of Slickrock Mbr Entrada Ss 975'; **11:22 collected water sample from 1000' (Halliburton lab test May 22 SG at 60° F 1.013, pH 7.6, Rw 0.41 ohm-meter and calculated TDS 36,186 ppm);** 11:29 conn @ 1010' no shows from white & light red fine grain ss; 11:40 conn @ 1030' no shows from white & pink fine grain ss; 11:53 conn @ 1050' no shows from white & pink fine grain ss; 12:02 conn @ 1070' no shows from pink fine grain ss; 12:15 conn @ 1090' no shows from pink fine grain ss;

12:26 conn @ 1110' no shows from pink to red fine grain ss; 12:37 conn @ 1130' no shows from pink to red fine grain ss; **12:40 collected water sample from 1140' (Halliburton lab test May 22 SG at 60° F 1.012, pH 7.4, Rw 0.44 ohm-meter and calculated TDS 26,060 ppm);** 12:49 conn @ 1150' no shows from red brown fine grain ss; Top of Kayenta Fm 1150'; 13:01 conn @ 1170' no shows from maroon to red medium grain low porosity ss; 13:17 conn @ 1190' no shows from maroon & white medium grain low porosity ss; 13:42 conn @ 1210' no shows from variegated medium grain low porosity ss; 14:02 conn @ 1230' no shows from variegated medium to fine grain low porosity ss; 14:23 conn @ 1250' no shows from white & maroon medium to fine grain low porosity ss; 14:45 conn @ 1270' no shows from white & maroon medium to fine grain low porosity ss; 15:12 conn @ 1290' missed sample due to discussion w/Halliburton rep & delivery of 3 water samples to be analyzed by Halliburton lab in Grand Junction; 15:36 conn @ 1310' no shows from maroon, green & white fine grain low porosity ss; 15:55 conn @ 1330' no shows from variegated fine grain low porosity ss; Significant water production increase to 8 bbls per hr and drilling break in last 5' from salmon fine grain porous ss; Top of Wingate Ss 1325'; 16:00 stopped drilling to allow well to fill with water and set up to unload and drill out to TD on May 21; TOH 26½ stds; 16:45 Propetroco crew off location; Drilled 440' in about 5 hrs (avg 80 ft/hr); TD 1330'; SDFN

2010-05-21 07:30 Propetroco crew on location to begin rig service; 08:45 lit igniter, TIH 12 stds & unloaded water in well from 720' by building 140 psi on hole with rig compressor indicating 310' of fluid above bit & fluid level near 410'; No shows; 09:15 TIH remaining stds plus single jt, made up Kelly rod, went to bottom & found 2' fill; Unloaded lower part of well & circulated clean; No shows; **09:25 caught water sample of overnight infill from Morrison Mbrs, Summerville Fm, Entrada Ss, Kayenta Fm & top few feet of Wingate Ss (Halliburton lab test May 22 SG at 60° F 1.020, pH 7.5, Rw 0.34 ohm-meter and calculated TDS 35,220 ppm);** 19:35 reconn @ 1330' & commenced drilling; 10:01 conn @ 1350' no shows from variegated shale & salmon fine grain porous ss below 1340'; 10:16 conn @ 1370' no shows from salmon fine grain porous ss; 10:25 conn @ 1390' no shows from salmon fine grain porous ss; 10:41 conn @ 1410' no shows from salmon fine grain porous ss; 10:53 conn @ 1430' no shows from salmon fine grain porous ss; Water production increased from the 4 or 5 bbls per hr of previous day to 30 to 40 bbls per hr (720 to 960 bbls per day); 11:10 conn @ 1450' no shows from salmon fine grain porous ss; 11:26 conn @ 1470' no shows from salmon & less porous maroon fine grain ss; 11:40 conn @ 1490' no shows from salmon fine grain porous ss; 11:58 conn @ 1510' no shows from salmon fine grain porous ss; 12:20 conn @ 1530' no shows from salmon fine grain porous ss; 12:41 conn @ 1550' no shows from salmon & less porous maroon fine grain ss; 12:56 conn @ 1570' no shows from less porous maroon & salmon fine grain ss; 13:15 conn @ 1590' no shows from low porosity maroon fine grain ss & shale; 13:35 conn @ 1610' no shows from salmon & less porous maroon fine grain ss; 13:50 conn @ 1630' no shows from less porous maroon & salmon fine grain ss; 14:11 conn @ 1650' no shows from low porosity maroon fine grain ss & shale; 14:36 conn @ 1670' no shows from low porosity maroon fine grain ss & shale; 14:55 conn @ 1690' no shows from low porosity salmon & maroon fine grain ss & shale & dark red shale in lower 2'; Top of Chinle Fm 1688'; 15:16 conn @ 1710' no shows from maroon, dark red & green shale; **15:25 caught water sample while drilling 1705-15' in Chinle Fm (Halliburton lab test May 22 SG at 60° F 1.014, pH 7.6, Rw 0.38 ohm-meter and calculated TDS 52,763 ppm);** Resistivity of water sample was 0.366 ohm-meters at 80° F similar to the resistivity of a 15,000 ppm pure NaCl solution; 15:30 reached TD @ 1730' no shows from dark red shale; 15:54 circulated hole clean & began TOH in preparation for logging on May 22; 17:30 Propetroco crew off location; Drilled 400' in about 6 hrs (avg 67 ft/hr); TD 1730'; SDFN

2010-05-22 18:00 Propetroco owner/driller Terry Leach on location to assist open hole logging operations by Halliburton; 19:30 Halliburton logging crew on site; Rigged up tools with minor problems due to shifted stds of racked drill pipe & collars in derrick; 20:30 measured 3' of fill in well with logging tools; 21:16 began logging triple combination True Resistivity, Spectral Density and Dual Spaced Neutron logs in formation water; 23:00 Halliburton tools laid down and Propetroco owner/driller off location; 23:30 Halliburton delivered 8 sets of triple logs and 6 sets of Borehole Volume Plot to Dave Allin and Tom Warnes plus digital files to Halliburton long string cementers & Dave Allin; TD 1730'; SDFWE

2010-05-23 01:00 Halliburton off location; 08:15 arrangements for open hole swab testing cancelled in favor of running & cementing long string casing due to verification of brine water in the Wingate Ss proposed injection interval; Open hole log tops depths and elevations measured from 4874' KB elevation:

Dakota Sandstone (Kd)	11'	+4863'
Cedar Mountain Fm (Kcm [K-1])	109'	+4765'
Morrison Fm		
Brushy Basin Member (Jmbb [K-0])	180'	+4694'
Salt Wash Member (Jmsw)	552'	+4322'
Tidwell Member (Jmt)	826'	+4048'
Summerville Fm (Js [J-5])	850'	+4024'
Curtis Fm		
Moab Tongue Member (Jctm)	885'	+3989'
Entrada Sandstone		
Slick Rock Member (Jes [J-3])	992'	+3882'
Kayenta Fm (Jk [J-2])	1143'	+3731'
Wingate Sandstone (Jw)	1342'	+3532'
Chinle Fm (Trc [J-0])	1679'	+3195'

The static fluid level logged in the well was 525'; Formation water resistivity (Rw) calculations made from the open hole logs for a representative layer of the Entrada Ss aquifer in the Jctm 962-66' with 26% porosity & 3 ohm-meters deep resistivity at 81° F estimated formation temperature indicated an equivalent pure NaCl solution of 23,000 ppm; **Rw calculations made from the open hole logs for a representative layer of the upper Wingate Ss aquifer (part of the proposed injection interval) 1346-94' with 22% porosity & 4 ohm-meters deep resistivity at 81° F estimated formation temperature indicated an equivalent pure NaCl solution of 22,500 ppm;** These calculations conformed favorably with the analyses of water samples collected while drilling and from overnight fill up reported earlier; TD 1730'; SDFWE

2010-05-24 08:00 High winds caused full day delay of laying down drill pipe; Casing crew and long string cementing ops schedule amended; Halliburton delivered DV tool and plug; TD 1730'; SDFWE

2010-05-25 07:30 Propetroco crew began laying down drill collars and drill pipe; 15:00 Weatherford casing crew on location; Preparations were begun to run casing but the power tongs deployed were too large to work safely on the rig; Work delayed until following day when more compact power tongs that have been used on Propetroco Rig 1 previously could be delivered; TD 1730'; 16:30 SDFN

2010-05-26 07:30 Began running 5.5" J-55 15.5 ppf long string with guide shoe on bottom, first centralizer clamped above the guide shoe, float collar on top of first jt (45'), second centralizer clamped above the float collar, additional centralizers on each following collar, DV tool 430' above guide shoe to land at 1300' KB and centralizers on every other collar until casing string was landed at 1730' KB; TD 1730'; 16:00 SDFN

2010-05-27 07:30 Began rigging up to pump Stage 1 of two stage cement job; Pumped 10 bbls water spacer, 17 bbls of 12.3 ppg 50-50 Pozmix cement slurry composed of 50 sks to yield 2.38 cuft/sk and 41 bbls water for displacement; Indications were that part of the flush had gone into the formation below the DV tool and Stage 2 was called off until mud could be circulated into the well to reduce fluid losses while that stage was pumped at a later date; Simple gel mud with polymer was mixed and used to fill the well; After a one hour wait 34 bbls of mud was used to break circulation and the well was left full; TD 1730'; 18:30 SDFN

2010-05-28 08:00 22 bbls of mud was used to break circulation and the well was left full; TD 1730'; 10:00 SDFWE

2010-05-29 Memorial Day weekend; TD 1730'; SDFWE

2010-05-30	Memorial Day weekend; TD 1730'; SDFWE
2010-05-31	Memorial Day weekend; TD 1730'; SDFWE
2010-06-01	08:00 8 bbls of mud was used to break circulation and the well was left full; Well appeared to be conditioned properly for further cementing operations & Halliburton was notified to pump Stage 2 on the following day; 1730' TD; 10:00 SDFN
2010-06-02	06:30 Halliburton cementers on location; 08:00 Propetroco crew on location to rig up cementers to pump Stage 2 of long string cement; 09:24 Began pumping 40 bbls water spacer & broke circulation after 4.5 bbls; 09:51 Dropped plug after pumping 7 bbls of 12.8 ppg 50-50 Pozmix cement slurry composed of 20 sks to yield 2.00 cuft/sk; 10:00; bumped plug in DV tool with 1380 psi after pumping 31 bbls water for displacement; Good circulation throughout job; 11:05 Halliburton crew left location; 12:00 Propetroco crew left location; 1730' TD; SDFN
2010-06-03	07:30 Propetroco crew on location; PU 4.75" rerun mill tooth bit, Bit 3, cleaned casing out through the DV tool & on down to 1680' & TOH; 1680' PBTD; SDFN
2010-06-04	07:30 Propetroco crew on location; Rigged up Rocky Mountain Wireline Service & recorded Sector Bond (CBL)/GR/CCL log; Verified excellent cement bond from PBTD to 1480' & good cement bond from 1480' to 1336' covering the Wingate Ss, little or no cement from 1336' to the DV tool at 1300' and fair to good cement bond from 1300' to 900' at the top of the Entrada Ss; 12:00 RMWS rigged down & left the location; 12:30 Propetroco crew left the location; 1680' PBTD; SDFWE
2010-06-05	1680' PBTD; SDFWE
2010-06-06	1680' PBTD; SDFWE
2010-06-07	08:00 Propetroco crew off while perforation plan was formalized and Utah DOGM was polled for guidance re additional cement work; 1680' PBTD; WOO
2010-06-08	08:00 Propetroco crew off while perforating contract was arranged; Updated Drilling/Completion report & transmitted to Utah DOGM; 1680' PBTD; WOO

RECEIVED
JUN 10 2010
DIV. OF OIL, GAS & MINING

Daily Drilling/Completion Report Version 2010-06-08-12:00
Westwater Farms, LLC Harley Dome 1 Injection Well, API No. 43-019-31622
600.5' fnl and 2,139' fel (NWNE) Section 10, T19S, R25E, SLM, Greater Cisco Field, Grand County, Utah
Graded Ground Level (GL and Permanent Datum) Elevation 4,864' and Kelly Bushing (KB) Elevation 4,874'
All depths cited are drilling depths prior to open-hole logging
Submitted by David L. Allin, Well Construction Consultant to Westwater Farms, LLC

2010-05-12 Completed Propetroco, Inc. Rotary Rig 1 move in and rig-up; Westwater Farms support crew dug blooie pit.

2010-05-13 08:00 spudded well with Bit 1: 11" fixed tungsten carbide insert bit on air hammer; Possible top of Morrison Fm near 188' GL; 13:00 reached surface hole TD 218' GL circulating air; Blew hole clean; No shows of oil, gas or water; 14:00 completed TOH with Bit 1 and began to wait for cementing float collar (FC) to be delivered by Halliburton; 15:00 Halliburton dropped off FC and two centralizer stops; 15:15 Mark Wright, Grand County Engineer, on site to check on progress; 15:30 shut down for the day and Propetroco crew off location; Westwater Farms support crew dug reserve pit; TD 218' GL; SDFN

2010-05-14 08:00 strapped five joints of new (2008) 8.625" J-55 24.00 ppf casing at 217.2' plus 1.2' FC for a total surface casing string of 218.4'; 09:00 Bart Kettle, Utah DOGM Petroleum Operations Specialist, on site to observe surface casing setting and cementing ops; 09:30 PU shoe joint but had to lay back down to re-rig lifting gear under traveling block to accommodate 45' length of casing jt; **Note that Propetroco Rig 1 is designed to handle casing joints no longer than 42';** 10:20 TIH surface casing (SC) shoe jt with FC made up and tack welded on bottom with centralizer 2' above; 10:45 TIH SC Jt 2, made up and tack welded on shoe joint top collar; 11:30 TIH SC Jt 3 with centralizer over SC Jt 2 top collar; 11:45 TIH SC Jt 4; 12:00 TIH SC Jt 5 with centralizer 10' below top collar and tagged fill near 214' GL; 12:15 landed casing at TD 218' GL by attaching Kelly rod and circulating fill out of hole with air and reciprocating the SC string to clean hole prior to cementing; No shows of oil, gas or water; 13:30 after lunch break began mixing cmt but delayed to fix minor duplex pump leaks; 14:00 completed mixing first tub of cmt containing 30 sx Portland cmt to yield 1.18 cuft/sack of 15.6 ppg, Class A slurry and total batch volume of 35.4 cuft (6.30 bbls); 14:15 completed top filling of SC/hole annulus with first tub of cement and flushed pump and hoses; 14:40 completed mixing second tub of cmt containing 30 sx; 14:45 SC/hole annulus filled up with 12 cuft cmt left in mixing tub for a grand total net cmt volume of 58.8 cuft (10.47 bbls); 15:00 built dike around casing, topped off with cmt and flushed out pump and hoses; Bart Kettle off location; 15:15 safety discussion re long string hole drilling ops; 15:30 checked cmt and no significant fall back; Propetroco crew off location; TD 218' GL; WOC; SDFWE

2010-05-15 11:45 Compiled and filed weekly ops report to DOGM; TD 218' GL; WOC; SDFWE

2010-05-16 TD 218' GL; WOC; SDFWE

2010-05-17 07:30 Propetroco crew on location; 07:45 pressure tested surface casing with rig compressor; Held 250 psi for 10 minutes without pressure loss; 08:00 disconnected Kelly rod from casing elevator crossover & cut off casing 1' above GL; 08:30 began to weld on Wellhead Inc. SOWO 8.625" casing head bowl; 08:45 hot shot service delivered Washington rotating head (WRH) and riser spools with seal rings, bolts and lubricator; 09:30 began to nipple up spools and WRH on Propetroco's 11" drilling flange; 13:00 David L. Allin (DLA) met w/Jared Lucador-Halliburton re open-hole swab testing, water sample lab analysis, open-hole logging, long string cementing & step-rate testing needs that Halliburton could help with & bid for; 15:30 Propetroco crew completed nippling up WRH, plumbing casing head, dropped off PDC drill bit & subs, fueled rig & left location; Westwater Farms (WF) support crew continued to fabricate parts to allow WRH to be connected to Propetroco's blooie line and the lower Kelly rod bushing nut to engage the WRH; TD 218' GL; SDFN

2010-05-18 07:30 Propetroco crew on location & began assembling blooie line; Telcon w/Travis Fihr-Halliburton re locating an inflatable earth packer to use to recover isolated sample of Wingate Ss water from open hole; 10:00 RIH w/Bit 2 & bit sub made up on first 6" drill collar; Bit 2: Rocky Mountain Bit 7.875"

RMG M557X s/n 70324 five blade PDC; Delay to adjust rig air compressor clutch; 11:00 RIH w/second 6" drill collar; 12:00 RIH w/all of bottom hole assembly (BHA) that would fit in the SC to 228" KB, stabbed the Kelly rod through the WRH rubber seal assembly & buttoned up WRH; 12:55 drilled through SC float collar (shoe) into upper part of Brushy Basin Mbr Morrison Fm circulating air; 13:20 encountered sandstone layers between 245' & 265' KB that were wet with no shows of oil or gas; 13:53 complete BHA composed of Bit 2, bit sub, 2 6" x 20' drill collars, 5 4.5" x 20' drill collars & 5 3.5" x 20' drill collars in hole to 270' KB; Began adding water with foaming agent to air flow to maintain circulation; 14:18 20' conn @ 290' KB **(note all depths from this point on are measured from KB)** no shows from variegated shale; 14:36 20' conn @ 310' **(note all drill pipe is composed of 20' joints)** no shows from variegated shale; 14:46 conn @ 330' no shows from variegated shale; 14:58 conn @ 350' no shows from variegated shale; 15:10 conn @ 370' no shows from variegated shale; 15:22 conn @ 390' no shows from variegated shale; 15:35 conn @ 410' no shows from variegated shale; 15:52 conn @ 430' no shows from variegated shale; 16:06 conn @ 450' no shows from variegated shale; 16:18 conn @ 470' no shows from variegated shale; 16:28 conn @ 490' no shows from variegated shale; 16:42 conn @ 510' no shows from variegated shale; 16:59 conn @ 530' no shows from variegated shale; 17:01 stopped drilling for the day after 300' run in about 4 hrs (avg 75 ft/hr); 17:08 completed TOH w/6 stds; TD 530'; SDFN

2010-05-19 07:30 Propetroco crew on location to begin rig service; 08:30 TIH 6 stds & found no significant fill; 08:50 circulated bottoms up with possible trace of gas (no flare from igniter) by building 180 psi on hole with rig compressor indicating 400' of fluid in hole (fluid level near 130' depth); 09:03 reconn @ 530' and commenced drilling; 09:16 conn @ 550' no shows from green shale; conn @ 570' no shows from green shale & fine grain ss below 565'; Top of Salt Wash Mbr Morrison Fm 565'; 09:45 telcon w/Bart Kettle-DOGM re projected schedule of proposed Entrada Ss and Wingate Ss water sampling; 09:52 conn @ 590' no shows from ss & variegated shale; 10:08 conn @ 610' no shows from variegated shale & fine grain ss; 10:24 conn @ 630' no shows from fine grain ss & variegated shale; 10:37 conn @ 650' no shows from fine grain ss & green shale; 10:55 conn @ 670' no shows from fine grain ss & green shale; 11:09 conn @ 690' no shows from ss & variegated shale; 11:33 conn @ 710' no shows from fine grain ss & variegated shale; 11:48 conn @ 730' no shows from variegated shale & fine grain ss; 12:01 conn @ 750' no shows from variegated shale; 12:19 conn @ 770' no shows from variegated shale; 12:32 conn @ 790' no shows from variegated shale & fine grain ss; 12:47 conn @ 810' no shows from variegated shale; 13:00 conn @ 830' no shows from variegated shale; 13:16 conn @ 850 no shows from variegated shale & gray ls; 13:35 conn @ 870' no shows from red brown shale; 13:50 conn @ 890' no shows from red brown shale & fine grain ss; Top of Summerville Fm 880'; 13:55 stopped drilling to repair rig motor fuel line leak; TOH 14 stds, shut down rig & began repair work; 16:15 Propetroco crew off location; Drilled 360' in about 5 hrs (avg 72 ft/hr); TD 890'; SDFN

2010-05-20 07:30 Propetroco crew on location to begin rig service & complete repair of fuel line & wiring; 09:00 lit igniter, TIH 7 stds & unloaded water in well from 520' by building 150 psi on hole with rig compressor indicating 330' of fluid above bit & fluid level near 190'; No shows; **09:15 caught water sample of overnight infill from Morrison Mbrs & Summerville Fm at TD 890' (Halliburton lab test May 22 SG at 60° F 1.013, pH 7.6, Rw 0.42 ohm-meter and calculated TDS 30,740 ppm);** 09:30 TIH 7 stds, made up Kelly rod, went to bottom & found no significant fill; Unloaded lower part of well & circulated clean; No shows; 10:05 reconn @ 890'; Suspended drilling to adjust clutch on rig compressor; 10:25 commenced drilling; 10:36 conn @ 910' no shows from frosted white fine to medium grain ss; Top of Moab Tongue Mbr of Curtis Fm (Entrada Ss aquifer) at 892'; 10:40 water production increased from the background mist introduced by the rig injection pump of 2 bbls per hr to 4 or 5 bbls per hr; 10:46 conn @ 930' no shows from frosted white fine to medium grain ss; 10:57 conn @ 950' no shows from frosted white medium to fine grain ss; 11:08 conn @ 970' no shows from frosted white fine to medium grain ss; 11:17 conn @ 990' no shows from white to pink fine grain ss; Top of Slickrock Mbr Entrada Ss 975'; **11:22 collected water sample from 1000' (Halliburton lab test May 22 SG at 60° F 1.013, pH 7.6, Rw 0.41 ohm-meter and calculated TDS 36,186 ppm);** 11:29 conn @ 1010' no shows from white & light red fine grain ss; 11:40 conn @ 1030' no shows from white & pink fine grain ss; 11:53 conn @ 1050' no shows from white & pink fine grain ss; 12:02 conn @ 1070' no shows from pink fine grain ss; 12:15 conn @ 1090' no shows from pink fine grain ss;

12:26 conn @ 1110' no shows from pink to red fine grain ss; 12:37 conn @ 1130' no shows from pink to red fine grain ss; **12:40 collected water sample from 1140' (Halliburton lab test May 22 SG at 60° F 1.012, pH 7.4, Rw 0.44 ohm-meter and calculated TDS 26,060 ppm);** 12:49 conn @ 1150' no shows from red brown fine grain ss; Top of Kayenta Fm 1150'; 13:01 conn @ 1170' no shows from maroon to red medium grain low porosity ss; 13:17 conn @ 1190' no shows from maroon & white medium grain low porosity ss; 13:42 conn @ 1210' no shows from variegated medium grain low porosity ss; 14:02 conn @ 1230' no shows from variegated medium to fine grain low porosity ss; 14:23 conn @ 1250' no shows from white & maroon medium to fine grain low porosity ss; 14:45 conn @ 1270' no shows from white & maroon medium to fine grain low porosity ss; 15:12 conn @ 1290' missed sample due to discussion w/Halliburton rep & delivery of 3 water samples to be analyzed by Halliburton lab in Grand Junction; 15:36 conn @ 1310' no shows from maroon, green & white fine grain low porosity ss; 15:55 conn @ 1330' no shows from variegated fine grain low porosity ss; Significant water production increase to 8 bbls per hr and drilling break in last 5' from salmon fine grain porous ss; Top of Wingate Ss 1325'; 16:00 stopped drilling to allow well to fill with water and set up to unload and drill out to TD on May 21; TOH 26½ stds; 16:45 Propetroco crew off location; Drilled 440' in about 5 hrs (avg 80 ft/hr); TD 1330'; SDFN

2010-05-21 07:30 Propetroco crew on location to begin rig service; 08:45 lit igniter, TIH 12 stds & unloaded water in well from 720' by building 140 psi on hole with rig compressor indicating 310' of fluid above bit & fluid level near 410'; No shows; 09:15 TIH remaining stds plus single jt, made up Kelly rod, went to bottom & found 2' fill; Unloaded lower part of well & circulated clean; No shows; **09:25 caught water sample of overnight infill from Morrison Mbrs, Summerville Fm, Entrada Ss, Kayenta Fm & top few feet of Wingate Ss (Halliburton lab test May 22 SG at 60° F 1.020, pH 7.5, Rw 0.34 ohm-meter and calculated TDS 35,220 ppm);** 19:35 reconn @ 1330' & commenced drilling; 10:01 conn @ 1350' no shows from variegated shale & salmon fine grain porous ss below 1340'; 10:16 conn @ 1370' no shows from salmon fine grain porous ss; 10:25 conn @ 1390' no shows from salmon fine grain porous ss; 10:41 conn @ 1410' no shows from salmon fine grain porous ss; 10:53 conn @ 1430' no shows from salmon fine grain porous ss; Water production increased from the 4 or 5 bbls per hr of previous day to 30 to 40 bbls per hr (720 to 960 bbls per day); 11:10 conn @ 1450' no shows from salmon fine grain porous ss; 11:26 conn @ 1470' no shows from salmon & less porous maroon fine grain ss; 11:40 conn @ 1490' no shows from salmon fine grain porous ss; 11:58 conn @ 1510' no shows from salmon fine grain porous ss; 12:20 conn @ 1530' no shows from salmon fine grain porous ss; 12:41 conn @ 1550' no shows from salmon & less porous maroon fine grain ss; 12:56 conn @ 1570' no shows from less porous maroon & salmon fine grain ss; 13:15 conn @ 1590' no shows from low porosity maroon fine grain ss & shale; 13:35 conn @ 1610' no shows from salmon & less porous maroon fine grain ss; 13:50 conn @ 1630' no shows from less porous maroon & salmon fine grain ss; 14:11 conn @ 1650' no shows from low porosity maroon fine grain ss & shale; 14:36 conn @ 1670' no shows from low porosity maroon fine grain ss & shale; 14:55 conn @ 1690' no shows from low porosity salmon & maroon fine grain ss & shale & dark red shale in lower 2'; Top of Chinle Fm 1688'; 15:16 conn @ 1710' no shows from maroon, dark red & green shale; **15:25 caught water sample while drilling 1705-15' in Chinle Fm (Halliburton lab test May 22 SG at 60° F 1.014, pH 7.6, Rw 0.38 ohm-meter and calculated TDS 52,763 ppm);** Resistivity of water sample was 0.366 ohm-meters at 80° F similar to the resistivity of a 15,000 ppm pure NaCl solution; 15:30 reached TD @ 1730' no shows from dark red shale; 15:54 circulated hole clean & began TOH in preparation for logging on May 22; 17:30 Propetroco crew off location; Drilled 400' in about 6 hrs (avg 67 ft/hr); TD 1730'; SDFN

2010-05-22 18:00 Propetroco owner/driller Terry Leach on location to assist open hole logging operations by Halliburton; 19:30 Halliburton logging crew on site; Rigged up tools with minor problems due to shifted stds of racked drill pipe & collars in derrick; 20:30 measured 3' of fill in well with logging tools; 21:16 began logging triple combination True Resistivity, Spectral Density and Dual Spaced Neutron logs in formation water; 23:00 Halliburton tools laid down and Propetroco owner/driller off location; 23:30 Halliburton delivered 8 sets of triple logs and 6 sets of Borehole Volume Plot to Dave Allin and Tom Warnes plus digital files to Halliburton long string cementers & Dave Allin; TD 1730'; SDFWE

2010-05-23 01:00 Halliburton off location; 08:15 arrangements for open hole swab testing cancelled in favor of running & cementing long string casing due to verification of brine water in the Wingate Ss proposed injection interval; Open hole log tops depths and elevations measured from 4874' KB elevation:

Dakota Sandstone (Kd)	11'	+4863'
Cedar Mountain Fm (Kcm [K-1])	109'	+4765'
Morrison Fm		
Brushy Basin Member (Jmbb [K-0])	180'	+4694'
Salt Wash Member (Jmsw)	552'	+4322'
Tidwell Member (Jmt)	826'	+4048'
Summerville Fm (Js [J-5])	850'	+4024'
Curtis Fm		
Moab Tongue Member (Jctm)	885'	+3989'
Entrada Sandstone		
Slick Rock Member (Jes [J-3])	992'	+3882'
Kayenta Fm (Jk [J-2])	1143'	+3731'
Wingate Sandstone (Jw)	1342'	+3532'
Chinle Fm (Trc [J-0])	1679'	+3195'

The static fluid level logged in the well was 525'; Formation water resistivity (Rw) calculations made from the open hole logs for a representative layer of the Entrada Ss aquifer in the Jctm 962-66' with 26% porosity & 3 ohm-meters deep resistivity at 81° F estimated formation temperature indicated an equivalent pure NaCl solution of 23,000 ppm; **Rw calculations made from the open hole logs for a representative layer of the upper Wingate Ss aquifer (part of the proposed injection interval) 1346-94' with 22% porosity & 4 ohm-meters deep resistivity at 81° F estimated formation temperature indicated an equivalent pure NaCl solution of 22,500 ppm;** These calculations conformed favorably with the analyses of water samples collected while drilling and from overnight fill up reported earlier; TD 1730'; SDFWE

2010-05-24 08:00 High winds caused full day delay of laying down drill pipe; Casing crew and long string cementing ops schedule amended; Halliburton delivered DV tool and plug; TD 1730'; SDFWE

2010-05-25 07:30 Propetroco crew began laying down drill collars and drill pipe; 15:00 Weatherford casing crew on location; Preparations were begun to run casing but the power tongs deployed were too large to work safely on the rig; Work delayed until following day when more compact power tongs that have been used on Propetroco Rig 1 previously could be delivered; TD 1730'; 16:30 SDFN

2010-05-26 07:30 Began running 5.5" J-55 15.5 ppf long string with guide shoe on bottom, first centralizer clamped above the guide shoe, float collar on top of first jt (45'), second centralizer clamped above the float collar, additional centralizers on each following collar, DV tool 430' above guide shoe to land at 1300' KB and centralizers on every other collar until casing string was landed at 1730' KB; TD 1730'; 16:00 SDFN

2010-05-27 07:30 Began rigging up to pump Stage 1 of two stage cement job; Pumped 10 bbls water spacer, 17 bbls of 12.3 ppg 50-50 Pozmix cement slurry composed of 50 sks to yield 2.38 cuft/sk and 41 bbls water for displacement; Indications were that part of the flush had gone into the formation below the DV tool and Stage 2 was called off until mud could be circulated into the well to reduce fluid losses while that stage was pumped at a later date; Simple gel mud with polymer was mixed and used to fill the well; After a one hour wait 34 bbls of mud was used to break circulation and the well was left full; TD 1730'; 18:30 SDFN

2010-05-28 08:00 22 bbls of mud was used to break circulation and the well was left full; TD 1730'; 10:00 SDFWE

2010-05-29 Memorial Day weekend; TD 1730'; SDFWE

2010-05-30	Memorial Day weekend; TD 1730'; SDFWE
2010-05-31	Memorial Day weekend; TD 1730'; SDFWE
2010-06-01	08:00 8 bbls of mud was used to break circulation and the well was left full; Well appeared to be conditioned properly for further cementing operations & Halliburton was notified to pump Stage 2 on the following day; 1730' TD; 10:00 SDFN
2010-06-02	06:30 Halliburton cementers on location; 08:00 Propetroco crew on location to rig up cementers to pump Stage 2 of long string cement; 09:24 Began pumping 40 bbls water spacer & broke circulation after 4.5 bbls; 09:51 Dropped plug after pumping 7 bbls of 12.8 ppg 50-50 Pozmix cement slurry composed of 20 sks to yield 2.00 cuft/sk; 10:00; bumped plug in DV tool with 1380 psi after pumping 31 bbls water for displacement; Good circulation throughout job; 11:05 Halliburton crew left location; 12:00 Propetroco crew left location; 1730' TD; SDFN
2010-06-03	07:30 Propetroco crew on location; PU 4.75" rerun mill tooth bit, Bit 3, cleaned casing out through the DV tool & on down to 1680' & TOH; 1680' PBTD; SDFN
2010-06-04	07:30 Propetroco crew on location; Rigged up Rocky Mountain Wireline Service & recorded Sector Bond (CBL)/GR/CCL log; Verified excellent cement bond from PBTD to 1480' & good cement bond from 1480' to 1336' covering the Wingate Ss, little or no cement from 1336' to the DV tool at 1300' and fair to good cement bond from 1300' to 900' at the top of the Entrada Ss; 12:00 RMWS rigged down & left the location; 12:30 Propetroco crew left the location; 1680' PBTD; SDFWE
2010-06-05	1680' PBTD; SDFWE
2010-06-06	1680' PBTD; SDFWE
2010-06-07	08:00 Propetroco crew off while perforation plan was formalized and Utah DOGM was polled for guidance re additional cement work; 1680' PBTD; WOO
2010-06-08	08:00 Propetroco crew off while perforating contract was arranged; Updated Drilling/Completion report & transmitted to Utah DOGM; 1680' PBTD; WOO

RECEIVED
JUN 17 2010
DIV. OF OIL, GAS & MINING

Daily Drilling/Completion Report Version 2010-06-17-17:45
Westwater Farms, LLC Harley Dome 1 Injection Well, API No. 43-019-31622
600.5' fnl and 2,139' fel (NWNE) Section 10, T19S, R25E, SLM, Greater Cisco Field, Grand County, Utah
Graded Ground Level (GL and Permanent Datum) Elevation 4,864' and Kelly Bushing (KB) Elevation 4,874'
All depths cited are drilling depths prior to open-hole logging
Submitted by David L. Allin, Well Construction Consultant to Westwater Farms, LLC

2010-05-12 Completed Propetroco, Inc. Rotary Rig 1 move in and rig-up; Westwater Farms support crew dug blooie pit.

2010-05-13 08:00 spudded well with Bit 1: 11" fixed tungsten carbide insert bit on air hammer; Possible top of Morrison Fm near 188' GL; 13:00 reached surface hole TD 218' GL circulating air; Blew hole clean; No shows of oil, gas or water; 14:00 completed TOH with Bit 1 and began to wait for cementing float collar (FC) to be delivered by Halliburton; 15:00 Halliburton dropped off FC and two centralizer stops; 15:15 Mark Wright, Grand County Engineer, on site to check on progress; 15:30 shut down for the day and Propetroco crew off location; Westwater Farms support crew dug reserve pit; TD 218' GL; SDFN

2010-05-14 08:00 strapped five joints of new (2008) 8.625" J-55 24.00 ppf casing at 217.2' plus 1.2' FC for a total surface casing string of 218.4'; 09:00 Bart Kettle, Utah DOGM Petroleum Operations Specialist, on site to observe surface casing setting and cementing ops; 09:30 PU shoe joint but had to lay back down to re-rig lifting gear under traveling block to accommodate 45' length of casing jt; **Note that Propetroco Rig 1 is designed to handle casing joints no longer than 42';** 10:20 TIH surface casing (SC) shoe jt with FC made up and tack welded on bottom with centralizer 2' above; 10:45 TIH SC Jt 2, made up and tack welded on shoe joint top collar; 11:30 TIH SC Jt 3 with centralizer over SC Jt 2 top collar; 11:45 TIH SC Jt 4; 12:00 TIH SC Jt 5 with centralizer 10' below top collar and tagged fill near 214' GL; 12:15 landed casing at TD 218' GL by attaching Kelly rod and circulating fill out of hole with air and reciprocating the SC string to clean hole prior to cementing; No shows of oil, gas or water; 13:30 after lunch break began mixing cmt but delayed to fix minor duplex pump leaks; 14:00 completed mixing first tub of cmt containing 30 sx Portland cmt to yield 1.18 cuft/sack of 15.6 ppg, Class A slurry and total batch volume of 35.4 cuft (6.30 bbls); 14:15 completed top filling of SC/hole annulus with first tub of cement and flushed pump and hoses; 14:40 completed mixing second tub of cmt containing 30 sx; 14:45 SC/hole annulus filled up with 12 cuft cmt left in mixing tub for a grand total net cmt volume of 58.8 cuft (10.47 bbls); 15:00 built dike around casing, topped off with cmt and flushed out pump and hoses; Bart Kettle off location; 15:15 safety discussion re long string hole drilling ops; 15:30 checked cmt and no significant fall back; Propetroco crew off location; TD 218' GL; WOC; SDFWE

2010-05-15 11:45 Compiled and filed weekly ops report to DOGM; TD 218' GL; WOC; SDFWE

2010-05-16 TD 218' GL; WOC; SDFWE

2010-05-17 07:30 Propetroco crew on location; 07:45 pressure tested surface casing with rig compressor; Held 250 psi for 10 minutes without pressure loss; 08:00 disconnected Kelly rod from casing elevator crossover & cut off casing 1' above GL; 08:30 began to weld on Wellhead Inc. SOWO 8.625" casing head bowl; 08:45 hot shot service delivered Washington rotating head (WRH) and riser spools with seal rings, bolts and lubricator; 09:30 began to nipple up spools and WRH on Propetroco's 11" drilling flange; 13:00 David L. Allin (DLA) met w/Jared Lucador-Halliburton re open-hole swab testing, water sample lab analysis, open-hole logging, long string cementing & step-rate testing needs that Halliburton could help with & bid for; 15:30 Propetroco crew completed nippling up WRH, plumbing casing head, dropped off PDC drill bit & subs, fueled rig & left location; Westwater Farms (WF) support crew continued to fabricate parts to allow WRH to be connected to Propetroco's blooie line and the lower Kelly rod bushing nut to engage the WRH; TD 218' GL; SDFN

2010-05-18 07:30 Propetroco crew on location & began assembling blooie line; Telcon w/Travis Fihr-Halliburton re locating an inflatable earth packer to use to recover isolated sample of Wingate Ss water from open hole; 10:00 RIH w/Bit 2 & bit sub made up on first 6" drill collar; Bit 2: Rocky Mountain Bit 7.875"

RMG M557X s/n 70324 five blade PDC; Delay to adjust rig air compressor clutch; 11:00 RIH w/second 6" drill collar; 12:00 RIH w/all of bottom hole assembly (BHA) that would fit in the SC to 228" KB, stabbed the Kelly rod through the WRH rubber seal assembly & buttoned up WRH; 12:55 drilled through SC float collar (shoe) into upper part of Brushy Basin Mbr Morrison Fm circulating air; 13:20 encountered sandstone layers between 245' & 265' KB that were wet with no shows of oil or gas; 13:53 complete BHA composed of Bit 2, bit sub, 2 6" x 20' drill collars, 5 4.5" x 20' drill collars & 5 3.5" x 20' drill collars in hole to 270' KB; Began adding water with foaming agent to air flow to maintain circulation; 14:18 20' conn @ 290' KB (**note all depths from this point on are measured from KB**) no shows from variegated shale; 14:36 20' conn @ 310' (**note all drill pipe is composed of 20' joints**) no shows from variegated shale; 14:46 conn @ 330' no shows from variegated shale; 14:58 conn @ 350' no shows from variegated shale; 15:10 conn @ 370' no shows from variegated shale; 15:22 conn @ 390' no shows from variegated shale; 15:35 conn @ 410' no shows from variegated shale; 15:52 conn @ 430' no shows from variegated shale; 16:06 conn @ 450' no shows from variegated shale; 16:18 conn @ 470' no shows from variegated shale; 16:28 conn @ 490' no shows from variegated shale; 16:42 conn @ 510' no shows from variegated shale; 16:59 conn @ 530' no shows from variegated shale; 17:01 stopped drilling for the day after 300' run in about 4 hrs (avg 75 ft/hr); 17:08 completed TOH w/6 stds; TD 530'; SDFN

2010-05-19 07:30 Propetroco crew on location to begin rig service; 08:30 TIH 6 stds & found no significant fill; 08:50 circulated bottoms up with possible trace of gas (no flare from igniter) by building 180 psi on hole with rig compressor indicating 400' of fluid in hole (fluid level near 130' depth); 09:03 reconn @ 530' and commenced drilling; 09:16 conn @ 550' no shows from green shale; conn @ 570' no shows from green shale & fine grain ss below 565'; Top of Salt Wash Mbr Morrison Fm 565'; 09:45 telcon w/Bart Kettle-DOGM re projected schedule of proposed Entrada Ss and Wingate Ss water sampling; 09:52 conn @ 590' no shows from ss & variegated shale; 10:08 conn @ 610' no shows from variegated shale & fine grain ss; 10:24 conn @ 630' no shows from fine grain ss & variegated shale; 10:37 conn @ 650' no shows from fine grain ss & green shale; 10:55 conn @ 670' no shows from fine grain ss & green shale; 11:09 conn @ 690' no shows from ss & variegated shale; 11:33 conn @ 710' no shows from fine grain ss & variegated shale; 11:48 conn @ 730' no shows from variegated shale & fine grain ss; 12:01 conn @ 750' no shows from variegated shale; 12:19 conn @ 770' no shows from variegated shale; 12:32 conn @ 790' no shows from variegated shale & fine grain ss; 12:47 conn @ 810' no shows from variegated shale; 13:00 conn @ 830' no shows from variegated shale; 13:16 conn @ 850 no shows from variegated shale & gray ls; 13:35 conn @ 870' no shows from red brown shale; 13:50 conn @ 890' no shows from red brown shale & fine grain ss; Top of Summerville Fm 880'; 13:55 stopped drilling to repair rig motor fuel line leak; TOH 14 stds, shut down rig & began repair work; 16:15 Propetroco crew off location; Drilled 360' in about 5 hrs (avg 72 ft/hr); TD 890'; SDFN

2010-05-20 07:30 Propetroco crew on location to begin rig service & complete repair of fuel line & wiring; 09:00 lit igniter, TIH 7 stds & unloaded water in well from 520' by building 150 psi on hole with rig compressor indicating 330' of fluid above bit & fluid level near 190'; No shows; **09:15 caught water sample of overnight infill from Morrison Mbrs & Summerville Fm at TD 890' (Halliburton lab test May 22 SG at 60° F 1.013, pH 7.6, Rw 0.42 ohm-meter and calculated TDS 30,740 ppm);** 09:30 TIH 7 stds, made up Kelly rod, went to bottom & found no significant fill; Unloaded lower part of well & circulated clean; No shows; 10:05 reconn @ 890'; Suspended drilling to adjust clutch on rig compressor; 10:25 commenced drilling; 10:36 conn @ 910' no shows from frosted white fine to medium grain ss; Top of Moab Tongue Mbr of Curtis Fm (Entrada Ss aquifer) at 892'; 10:40 water production increased from the background mist introduced by the rig injection pump of 2 bbls per hr to 4 or 5 bbls per hr; 10:46 conn @ 930' no shows from frosted white fine to medium grain ss; 10:57 conn @ 950' no shows from frosted white medium to fine grain ss; 11:08 conn @ 970' no shows from frosted white fine to medium grain ss; 11:17 conn @ 990' no shows from white to pink fine grain ss; Top of Slickrock Mbr Entrada Ss 975'; **11:22 collected water sample from 1000' (Halliburton lab test May 22 SG at 60° F 1.013, pH 7.6, Rw 0.41 ohm-meter and calculated TDS 36,186 ppm);** 11:29 conn @ 1010' no shows from white & light red fine grain ss; 11:40 conn @ 1030' no shows from white & pink fine grain ss; 11:53 conn @ 1050' no shows from white & pink fine grain ss; 12:02 conn @ 1070' no shows from pink fine grain ss; 12:15 conn @ 1090' no shows from pink fine grain ss;

12:26 conn @ 1110' no shows from pink to red fine grain ss; 12:37 conn @ 1130' no shows from pink to red fine grain ss; **12:40 collected water sample from 1140' (Halliburton lab test May 22 SG at 60° F 1.012, pH 7.4, Rw 0.44 ohm-meter and calculated TDS 26,060 ppm);** 12:49 conn @ 1150' no shows from red brown fine grain ss; Top of Kayenta Fm 1150'; 13:01 conn @ 1170' no shows from maroon to red medium grain low porosity ss; 13:17 conn @ 1190' no shows from maroon & white medium grain low porosity ss; 13:42 conn @ 1210' no shows from variegated medium grain low porosity ss; 14:02 conn @ 1230' no shows from variegated medium to fine grain low porosity ss; 14:23 conn @ 1250' no shows from white & maroon medium to fine grain low porosity ss; 14:45 conn @ 1270' no shows from white & maroon medium to fine grain low porosity ss; 15:12 conn @ 1290' missed sample due to discussion w/Halliburton rep & delivery of 3 water samples to be analyzed by Halliburton lab in Grand Junction; 15:36 conn @ 1310' no shows from maroon, green & white fine grain low porosity ss; 15:55 conn @ 1330' no shows from variegated fine grain low porosity ss; Significant water production increase to 8 bbls per hr and drilling break in last 5' from salmon fine grain porous ss; Top of Wingate Ss 1325'; 16:00 stopped drilling to allow well to fill with water and set up to unload and drill out to TD on May 21; TOH 26½ stds; 16:45 Propetroco crew off location; Drilled 440' in about 5 hrs (avg 80 ft/hr); TD 1330'; SDFN

2010-05-21 07:30 Propetroco crew on location to begin rig service; 08:45 lit igniter, TIH 12 stds & unloaded water in well from 720' by building 140 psi on hole with rig compressor indicating 310' of fluid above bit & fluid level near 410'; No shows; 09:15 TIH remaining stds plus single jt, made up Kelly rod, went to bottom & found 2' fill; Unloaded lower part of well & circulated clean; No shows; **09:25 caught water sample of overnight infill from Morrison Mbrs, Summerville Fm, Entrada Ss, Kayenta Fm & top few feet of Wingate Ss (Halliburton lab test May 22 SG at 60° F 1.020, pH 7.5, Rw 0.34 ohm-meter and calculated TDS 35,220 ppm);** 19:35 reconn @ 1330' & commenced drilling; 10:01 conn @ 1350' no shows from variegated shale & salmon fine grain porous ss below 1340'; 10:16 conn @ 1370' no shows from salmon fine grain porous ss; 10:25 conn @ 1390' no shows from salmon fine grain porous ss; 10:41 conn @ 1410' no shows from salmon fine grain porous ss; 10:53 conn @ 1430' no shows from salmon fine grain porous ss; **Water production increased from the 4 or 5 bbls per hr of previous day to 30 to 40 bbls per hr (720 to 960 bbls per day);** 11:10 conn @ 1450' no shows from salmon fine grain porous ss; 11:26 conn @ 1470' no shows from salmon & less porous maroon fine grain ss; 11:40 conn @ 1490' no shows from salmon fine grain porous ss; 11:58 conn @ 1510' no shows from salmon fine grain porous ss; 12:20 conn @ 1530' no shows from salmon fine grain porous ss; **Water production surging up to 60 bbls per hr (1,440 bbls per day)** 12:41 conn @ 1550' no shows from salmon & less porous maroon fine grain ss; 12:56 conn @ 1570' no shows from less porous maroon & salmon fine grain ss; 13:15 conn @ 1590' no shows from low porosity maroon fine grain ss & shale; 13:35 conn @ 1610' no shows from salmon & less porous maroon fine grain ss; 13:50 conn @ 1630' no shows from less porous maroon & salmon fine grain ss; 14:11 conn @ 1650' no shows from low porosity maroon fine grain ss & shale; 14:36 conn @ 1670' no shows from low porosity maroon fine grain ss & shale; 14:55 conn @ 1690' no shows from low porosity salmon & maroon fine grain ss & shale & dark red shale in lower 2'; Top of Chinle Fm 1688'; 15:16 conn @ 1710' no shows from maroon, dark red & green shale; **15:25 caught water sample while drilling 1705-15' in Chinle Fm (Halliburton lab test May 22 SG at 60° F 1.014, pH 7.6, Rw 0.38 ohm-meter and calculated TDS 52,763 ppm);** Resistivity of water sample was 0.366 ohm-meters at 80° F similar to the resistivity of a 15,000 ppm pure NaCl solution; 15:30 reached TD @ 1730' no shows from dark red shale; 15:54 circulated hole clean & began TOH in preparation for logging on May 22; 17:30 Propetroco crew off location; Drilled 400' in about 6 hrs (avg 67 ft/hr); TD 1730'; SDFN

2010-05-22 18:00 Propetroco owner/driller Terry Leach on location to assist open hole logging operations by Halliburton; 19:30 Halliburton logging crew on site; Rigged up tools with minor problems due to shifted stds of racked drill pipe & collars in derrick; 20:30 measured 3' of fill in well with logging tools; 21:16 began logging triple combination True Resistivity, Spectral Density and Dual Spaced Neutron logs in formation water; 23:00 Halliburton tools laid down and Propetroco owner/driller off location; 23:30 Halliburton delivered 8 sets of triple logs and 6 sets of Borehole Volume Plot to Dave Allin and Tom Warnes plus digital files to Halliburton long string cementers & Dave Allin; TD 1730'; SDFWE

2010-05-23 01:00 Halliburton off location; 08:15 arrangements for open hole swab testing cancelled in favor of running & cementing long string casing due to verification of brine water in the Wingate Ss proposed injection interval; **Open hole log tops depths and elevations measured from 4874' KB elevation:**

Dakota Sandstone (Kd)	11'	+4863'
Cedar Mountain Fm (Kcm [K-1])	109'	+4765'
Morrison Fm		
Brushy Basin Member (Jmbb [K-0])	180'	+4694'
Salt Wash Member (Jmsw)	552'	+4322'
Tidwell Member (Jmt)	826'	+4048'
Summerville Fm (Js [J-5])	850'	+4024'
Curtis Fm		
Moab Tongue Member (Jctm)	885'	+3989'
Entrada Sandstone		
Slick Rock Member (Jes [J-3])	992'	+3882'
Kayenta Fm (Jk [J-2])	1143'	+3731'
Wingate Sandstone (Jw)	1342'	+3532'
Chinle Fm (Trc [J-0])	1679'	+3195'

The static fluid level logged in the well was 525'; Formation water resistivity (Rw) calculations made from the open hole logs for a representative layer of the Entrada Ss aquifer in the Jctm 962-66' with 26% porosity & 3 ohm-meters deep resistivity at 81° F estimated formation temperature indicated an equivalent pure NaCl solution of 23,000 ppm; **Rw calculations made from the open hole logs for a representative layer of the upper Wingate Ss aquifer (part of the proposed injection interval) 1346-94' with 22% porosity & 4 ohm-meters deep resistivity at 81° F estimated formation temperature indicated an equivalent pure NaCl solution of 22,500 ppm;** These calculations conformed favorably with the analyses of water samples collected while drilling and from overnight fill up reported earlier; TD 1730'; SDFWE

2010-05-24 08:00 High winds caused full day delay of laying down drill pipe; Casing crew and long string cementing ops schedule amended; Halliburton delivered DV tool and plug; TD 1730'; SDFWE

2010-05-25 07:30 Propetroco crew began laying down drill collars and drill pipe; 14:00 Weatherford casing crew on location; Preparations were begun to run casing but the power tongs deployed were too large to work safely on the rig; Work delayed until following day when more compact power tongs that have been previously used on Propetroco Rig 1 could be delivered; TD 1730'; 16:00 SDFN

2010-05-26 07:30 Began running 5.5" J-55 15.5 ppf long string with guide shoe on bottom, first centralizer clamped above the guide shoe, float collar on top of first jt (45'), second centralizer clamped above the float collar, additional centralizers on each following collar, DV tool 430' above guide shoe to land at 1300' KB and centralizers on every other collar until casing string was landed at 1730' KB; 10:00 Halliburton cementers on location; 14:50 Casing crew RD & began first stage LS cement operations; 14:58 Pumped 49 bbls water down the casing to ensure circulation; 15:17 Pumped 18.8 bbls first stage cement composed of 50 sks mixed to yield 2.11 cuft/sk Halliburton Versacem™ System 12.3 ppg slurry; 15:34 dropped first stage plug; 15:55 completed displacement of 42 bbls of water after some pump inlet blockage problems & bumped the plug in the float collar with 1,575 psi; 16:03 Bumped plug again with 1,610 psi after well went on vacuum & unknown volume of water was used to refill well; 16:20 Dropped DV tool opening device and opened the tool with 670 psi; 16:22 Circulated well with 60 bbls of water (broke circulation after first 10 bbls); 16:56 First stage completed & planned to pump second stage the following day; Cementers remained on location overnight; TD 1730'; 18:00 SDFN

2010-05-27 02:00(?) Cementers filled casing with 32 bbls water; 04:46 Cementers filled casing with 19 bbls water; 7:30 Propetroco crew on location; 09:00 Called off second stage cement operations to condition well with mud to minimize additional fluid losses; 11:00 Cementers RD & off location; Changed blooie line out & added flow line to steel mud pit & mixed mud; TD 1730'; 17:30 SDFN

2010-05-28 07:30 Propetroco crew on location; Mixed mud, filled casing with 21 bbls & circulated to condition formation for second stage cement; Casing was left full; TD 1730'; 14:00 SDFWE

2010-05-29 Memorial Day weekend; TD 1730'; SDFWE

2010-05-30 Memorial Day weekend; TD 1730'; SDFWE

2010-05-31 09:30 Conditioned mud (8.6 ppg with 48 viscosity) & circulated well through DV tool; 11:30 shut down pump to check on loss; Mud loss after was 1" from pit or about 8 bbls; TD 1730'; 12:30 SDFN

2010-06-01 Well appeared to be conditioned properly for further cementing operations & Halliburton was notified to pump second stage LS cement on the following day; No operations; 1730' TD; SDFN

2010-06-02 06:30 Halliburton cementers on location; 07:30 Propetroco crew on location to RU cementers to pump second stage of LS cement; 09:24 Began pumping 40 bbls water spacer & broke circulation after 4.5 bbls; 09:51 Dropped plug after pumping 7 bbls of 12.8 ppg Halliburton Versacem™ System slurry composed of 20 sks to yield 2.00 cuft/sk; 10:00; Landed plug at 75 psi & bumped plug in DV tool with 1,380 psi after pumping 31 bbls water for displacement; Good circulation throughout job; 11:05 Cementers left location; Propetroco crew nippled down 11" rotating head & blooie line & nippled up 7" rotating head; 1730' TD; 15:45 SDFN

2010-06-03 07:30 Propetroco crew on location; PU 4.75" PDC bit, Bit 3, cleaned casing out through the DV tool & on down to 1680' & TOH; 1680' PBTD; 15:45 SDFN

2010-06-04 07:30 Propetroco crew on location; Rigged up Rocky Mountain Wireline Service & recorded Sector Bond (CBL)/GR/CCL log; Verified excellent cement bond from PBTD to 1480' & good cement bond from 1480' to 1336' covering the Wingate Ss, little or no cement from 1336' to the DV tool at 1300' and fair to good cement bond from 1300' to 900' at the top of the Entrada Ss; 12:00 RMWS RD & left the location; 1680' PBTD; 12:00 SDFWE

2010-06-05 1680' PBTD; SDFWE

2010-06-06 1680' PBTD; SDFWE

2010-06-07 08:00 Propetroco crew off while perforation plan was formalized and Utah DOGM was polled for guidance re additional cement work; 1680' PBTD; WOO

2010-06-08 08:00 Propetroco crew off while perforating contract was arranged; Updated Drilling/Completion report & transmitted to Utah DOGM; 1680' PBTD; WOO

2010-06-09 07:30 Propetroco crew rigged a 2.375" x 5.5" J-Type tubing packer on a 10' long 2.375" pup jt with a tee for blow down valve & gauge point & set it in the top of the 5.5" casing; 09:00 Rocky Mountain Wireline Service on location to RU for perforating ops; 10:00 The rig pump was used to fill the pup jt & packer assembly and pressurize it and the casing to 300 psi; 10:05 Pressure test good for first five minutes and then packer began leaking; Scheduling constraints precluded an overhaul or replacement of the packer; 10:50 RU RMWS sheaves on rig; 11:15 RMWS began first perforating run; 13:00 RMWS completed perforating ops in 5 runs & began RD; **Perforations were made in 11 zones in the Wingate Ss over the gross interval 1344-1631' (per 5-22-10 Halliburton triple) with 21 gram Owen Superhero charges loaded in 3.125" expendable, scalloped casing guns 4 spf phased 90° for a total of 552 .37" holes & optimal 43" penetration as follows:**

1344-1418'
1422-26'
1451-59'

1478-82'
1486-90'
1498-1506'
1513-17'
1526-30'
1543-53'
1560-68'
1621-31'

12:15 The fluid level in the well retreated to 200' between the third and fourth runs; 13:45 unloaded fluid from csg w/285 psi air pressure after TIH w/bit and 27 stds of drill pipe with Kelly down to 1110' indicating that the fluid level in the csg was near 460'; 14:50 TIH 7 stds with Kelly down to 1360' & unloaded csg after 2 minutes of building air pressure; 15:07 TIH remaining 8 stds with bit set near 1660' or 20' above PBTD, unloaded csg & began circulation with air at 150 psi; Air circulation produced water from the perforations at a rate near 15 gpm; Fluid recovery included mud, mud filtrate, displacement water from cementing & some formation water; **16:00 Collected water sample from flow line** & ended circulation after recovering about 50 bbls of fluid from unloading the csg & circulating the csg with air; 17:00 Allin dropped off water sample at Halliburton lab for analysis **(W200 Halliburton lab report June 10 SG at 60° F 1.009, pH 8.0, Rw 0.65 ohm-meter and calculated TDS 10,155 ppm)**; 1680' PBTD; SDFN

2010-06-10 07:30 Propetroco crew on location; 08:55 Completed TOH 5 stds & unloaded csg from 1460' with 280 psi air pressure indicating the fluid level in csg was near 820'; 09:02 completed TIH 5 stds to reset bit at 1660' & unloaded csg then began circulation with air at 150 psi; Fluid recovery included mud, mud filtrate, displacement water & formation water; 3.5" tbg string delivered to the site; 09:40 fluid flow rate 13 gpm or 446 bpd from flow line; 10:40 fluid flow rate 13 gpm or 446 bpd; 11:40 fluid flow rate 11 gpm or 377 bpd; 12:40 fluid flow rate 12 gpm or 411 bpd; Fluid noticeably more saline; 13:40 fluid flow rate 12 gpm or 411 bpd; **14:40 fluid flow rate 11.5 gpm or 394 bpd & caught water sample in presence of Bart Kettle-Utah DOGM;** 14:45 shut down production testing operations; 15:40 Allin dropped off water sample at Halliburton lab for analysis **(W201 Halliburton lab report June 10 SG at 60° F 1.013, pH 7.8, Rw 0.36 ohm-meter and calculated TDS 34,378 ppm)**; 1680' PBTD; SDFN

2010-06-11 Operations suspended until information from testing could be analyzed & forwarded to Utah DOGM for consideration & a production packer could be lined up; 1680' PBTD; WOO

2010-06-12 1680' PBTD; SDFWE

2010-06-13 1680' PBTD; SDFWE

2010-06-14 07:30 Propetroco crew on site; TOH laying down drill pipe in preparation for setting permanent production packer; Fluid level appeared to be near 600'; Westwater Farms support crew prepared 3.5" tubing string; 15:00 shut down for day; 1680' PBTD; SDFN

2010-06-15 07:30 Propetroco crew on site; RU Rocky Mountain Wireline Service to position anchor & set permanent packer in the csg; Lance Messinger-DownholeTool Service on site with the permanent packer & setting instructions; The permanent packer was set with the hanger at 1272' and top of packer at 1269'; RD RMWS and SDFN; 1680' PBTD

2010-06-16 07:30 Propetroco crew on site; RU Weatherford crew to run tubing, but they had to delay to exchange tongs for more compact equipment suitable for use on the rig; Ran 3.5" EUE 9.3 ppf slightly used tbg with nipple on end to engage permanent packer to a point just above the packer; Circulated the formation water out of the csg and replaced it with water treated with corrosion inhibitors; Engaged the tbg into the packer, stretched out tbg & set the slips in the tbg head. Cut off the tbg & welded on a bell nipple; 1680' PBTD; SDFN

2010-06-17	Operations suspended pending issuance of an approval from Utah DOGM to convert the Harley Dome 1 for injection; Transmitted updated copy of daily reports to Utah DOGM

RECEIVED
JUN 2 7 2010
DIV. OF OIL, GAS & MINING

Daily Drilling/Completion Report Version 2010-06-27-08:30
Westwater Farms, LLC Harley Dome 1 Injection Well, API No. 43-019-31622
600.5' fnl and 2,139' fel (NWNE) Section 10, T19S, R25E, SLM, Greater Cisco Field, Grand County, Utah
Graded Ground Level (GL and Permanent Datum) Elevation 4,864' and Kelly Bushing (KB) Elevation 4,874'
All depths cited are drilling depths prior to open-hole logging
Submitted by David L. Allin, Well Construction Consultant to Westwater Farms, LLC

2010-05-12 Completed Propetroco, Inc. Rotary Rig 1 move in and rig-up; Westwater Farms support crew dug blooie pit.

2010-05-13 08:00 spudded well with Bit 1: 11" fixed tungsten carbide insert bit on air hammer; Possible top of Morrison Fm near 188' GL; 13:00 reached surface hole TD 218' GL circulating air; Blew hole clean; No shows of oil, gas or water; 14:00 completed TOH with Bit 1 and began to wait for cementing float collar (FC) to be delivered by Halliburton; 15:00 Halliburton dropped off FC and two centralizer stops; 15:15 Mark Wright, Grand County Engineer, on site to check on progress; 15:30 shut down for the day and Propetroco crew off location; Westwater Farms support crew dug reserve pit; TD 218' GL; SDFN

2010-05-14 08:00 strapped five joints of new (2008) 8.625" J-55 24.00 ppf casing at 217.2' plus 1.2' FC for a total surface casing string of 218.4'; 09:00 Bart Kettle, Utah DOGM Petroleum Operations Specialist, on site to observe surface casing setting and cementing ops; 09:30 PU shoe joint but had to lay back down to re-rig lifting gear under traveling block to accommodate 45' length of casing jt; **Note that Propetroco Rig 1 is designed to handle casing joints no longer than 42';** 10:20 TIH surface casing (SC) shoe jt with FC made up and tack welded on bottom with centralizer 2' above; 10:45 TIH SC Jt 2, made up and tack welded on shoe joint top collar; 11:30 TIH SC Jt 3 with centralizer over SC Jt 2 top collar; 11:45 TIH SC Jt 4; 12:00 TIH SC Jt 5 with centralizer 10' below top collar and tagged fill near 214' GL; 12:15 landed casing at TD 218' GL by attaching Kelly rod and circulating fill out of hole with air and reciprocating the SC string to clean hole prior to cementing; No shows of oil, gas or water; 13:30 after lunch break began mixing cmt but delayed to fix minor duplex pump leaks; 14:00 completed mixing first tub of cmt containing 30 sx Portland cmt to yield 1.18 cuft/sack of 15.6 ppg, Class A slurry and total batch volume of 35.4 cuft (6.30 bbls); 14:15 completed top filling of SC/hole annulus with first tub of cement and flushed pump and hoses; 14:40 completed mixing second tub of cmt containing 30 sx; 14:45 SC/hole annulus filled up with 12 cuft cmt left in mixing tub for a grand total net cmt volume of 58.8 cuft (10.47 bbls); 15:00 built dike around casing, topped off with cmt and flushed out pump and hoses; Bart Kettle off location; 15:15 safety discussion re long string hole drilling ops; 15:30 checked cmt and no significant fall back; Propetroco crew off location; TD 218' GL; WOC; SDFWE

2010-05-15 11:45 Compiled and filed weekly ops report to DOGM; TD 218' GL; WOC; SDFWE

2010-05-16 TD 218' GL; WOC; SDFWE

2010-05-17 07:30 Propetroco crew on location; 07:45 pressure tested surface casing with rig compressor; Held 250 psi for 10 minutes without pressure loss; 08:00 disconnected Kelly rod from casing elevator crossover & cut off casing 1' above GL; 08:30 began to weld on Wellhead Inc. SOWO 8.625" casing head bowl; 08:45 hot shot service delivered Washington rotating head (WRH) and riser spools with seal rings, bolts and lubricator; 09:30 began to nipple up spools and WRH on Propetroco's 11" drilling flange; 13:00 David L. Allin (DLA) met w/Jared Lucador-Halliburton re open-hole swab testing, water sample lab analysis, open-hole logging, long string cementing & step-rate testing needs that Halliburton could help with & bid for; 15:30 Propetroco crew completed nippling up WRH, plumbing casing head, dropped off PDC drill bit & subs, fueled rig & left location; Westwater Farms (WF) support crew continued to fabricate parts to allow WRH to be connected to Propetroco's blooie line and the lower Kelly rod bushing nut to engage the WRH; TD 218' GL; SDFN

2010-05-18 07:30 Propetroco crew on location & began assembling blooie line; Telcon w/Travis Fihr-Halliburton re locating an inflatable earth packer to use to recover isolated sample of Wingate Ss water from open hole; 10:00 RIH w/Bit 2 & bit sub made up on first 6" drill collar; Bit 2: Rocky Mountain Bit 7.875"

RMG M557X s/n 70324 five blade PDC; Delay to adjust rig air compressor clutch; 11:00 RIH w/second 6" drill collar; 12:00 RIH w/all of bottom hole assembly (BHA) that would fit in the SC to 228" KB, stabbed the Kelly rod through the WRH rubber seal assembly & buttoned up WRH; 12:55 drilled through SC float collar (shoe) into upper part of Brushy Basin Mbr Morrison Fm circulating air; 13:20 encountered sandstone layers between 245' & 265' KB that were wet with no shows of oil or gas; 13:53 complete BHA composed of Bit 2, bit sub, 2 6" x 20' drill collars, 5 4.5" x 20' drill collars & 5 3.5" x 20' drill collars in hole to 270' KB; Began adding water with foaming agent to air flow to maintain circulation; 14:18 20' conn @ 290' KB **(note all depths from this point on are measured from KB)** no shows from variegated shale; 14:36 20' conn @ 310' **(note all drill pipe is composed of 20' joints)** no shows from variegated shale; 14:46 conn @ 330' no shows from variegated shale; 14:58 conn @ 350' no shows from variegated shale; 15:10 conn @ 370' no shows from variegated shale; 15:22 conn @ 390' no shows from variegated shale; 15:35 conn @ 410' no shows from variegated shale; 15:52 conn @ 430' no shows from variegated shale; 16:06 conn @ 450' no shows from variegated shale; 16:18 conn @ 470' no shows from variegated shale; 16:28 conn @ 490' no shows from variegated shale; 16:42 conn @ 510' no shows from variegated shale; 16:59 conn @ 530' no shows from variegated shale; 17:01 stopped drilling for the day after 300' run in about 4 hrs (avg 75 ft/hr); 17:08 completed TOH w/6 stds; TD 530'; SDFN

2010-05-19 07:30 Propetroco crew on location to begin rig service; 08:30 TIH 6 stds & found no significant fill; 08:50 circulated bottoms up with possible trace of gas (no flare from igniter) by building 180 psi on hole with rig compressor indicating 400' of fluid in hole (fluid level near 130' depth); 09:03 reconn @ 530' and commenced drilling; 09:16 conn @ 550' no shows from green shale; conn @ 570' no shows from green shale & fine grain ss below 565'; Top of Salt Wash Mbr Morrison Fm 565'; 09:45 telcon w/Bart Kettle-DOGM re projected schedule of proposed Entrada Ss and Wingate Ss water sampling; 09:52 conn @ 590' no shows from ss & variegated shale; 10:08 conn @ 610' no shows from variegated shale & fine grain ss; 10:24 conn @ 630' no shows from fine grain ss & variegated shale; 10:37 conn @ 650' no shows from fine grain ss & green shale; 10:55 conn @ 670' no shows from fine grain ss & green shale; 11:09 conn @ 690' no shows from ss & variegated shale; 11:33 conn @ 710' no shows from fine grain ss & variegated shale; 11:48 conn @ 730' no shows from variegated shale & fine grain ss; 12:01 conn @ 750' no shows from variegated shale; 12:19 conn @ 770' no shows from variegated shale; 12:32 conn @ 790' no shows from variegated shale & fine grain ss; 12:47 conn @ 810' no shows from variegated shale; 13:00 conn @ 830' no shows from variegated shale; 13:16 conn @ 850 no shows from variegated shale & gray ls; 13:35 conn @ 870' no shows from red brown shale; 13:50 conn @ 890' no shows from red brown shale & fine grain ss; Top of Summerville Fm 880'; 13:55 stopped drilling to repair rig motor fuel line leak; TOH 14 stds, shut down rig & began repair work; 16:15 Propetroco crew off location; Drilled 360' in about 5 hrs (avg 72 ft/hr); TD 890'; SDFN

2010-05-20 07:30 Propetroco crew on location to begin rig service & complete repair of fuel line & wiring; 09:00 lit igniter, TIH 7 stds & unloaded water in well from 520' by building 150 psi on hole with rig compressor indicating 330' of fluid above bit & fluid level near 190'; No shows; **09:15 caught water sample of overnight infill from Morrison Mbrs & Summerville Fm at TD 890' (Halliburton lab test W177 May 22 SG at 60° F 1.013, pH 7.6, Rw 0.42 ohm-meter and calculated TDS 30,740 ppm);** 09:30 TIH 7 stds, made up Kelly rod, went to bottom & found no significant fill; Unloaded lower part of well & circulated clean; No shows; 10:05 reconn @ 890'; Suspended drilling to adjust clutch on rig compressor; 10:25 commenced drilling; 10:36 conn @ 910' no shows from frosted white fine to medium grain ss; Top of Moab Tongue Mbr of Curtis Fm (Entrada Ss aquifer) at 892'; 10:40 water production increased from the background mist introduced by the rig injection pump of 2 bbls per hr to 4 or 5 bbls per hr; 10:46 conn @ 930' no shows from frosted white fine to medium grain ss; 10:57 conn @ 950' no shows from frosted white medium to fine grain ss; 11:08 conn @ 970' no shows from frosted white fine to medium grain ss; 11:17 conn @ 990' no shows from white to pink fine grain ss; Top of Slickrock Mbr Entrada Ss 975'; **11:22 collected water sample from 1000' (Halliburton lab test W175 May 22 SG at 60° F 1.013, pH 7.6, Rw 0.41 ohm-meter and calculated TDS 36,186 ppm);** 11:29 conn @ 1010' no shows from white & light red fine grain ss; 11:40 conn @ 1030' no shows from white & pink fine grain ss; 11:53 conn @ 1050' no shows from white & pink fine grain ss; 12:02 conn @ 1070' no shows from pink fine grain ss; 12:15 conn @ 1090' no shows from pink fine

grain ss; 12:26 conn @ 1110' no shows from pink to red fine grain ss; 12:37 conn @ 1130' no shows from pink to red fine grain ss; **12:40 collected water sample from 1140' (Halliburton lab test W176 May 22 SG at 60° F 1.012, pH 7.4, Rw 0.44 ohm-meter and calculated TDS 26,060 ppm);** 12:49 conn @ 1150' no shows from red brown fine grain ss; Top of Kayenta Fm 1150'; 13:01 conn @ 1170' no shows from maroon to red medium grain low porosity ss; 13:17 conn @ 1190' no shows from maroon & white medium grain low porosity ss; 13:42 conn @ 1210' no shows from variegated medium grain low porosity ss; 14:02 conn @ 1230' no shows from variegated medium to fine grain low porosity ss; 14:23 conn @ 1250' no shows from white & maroon medium to fine grain low porosity ss; 14:45 conn @ 1270' no shows from white & maroon medium to fine grain low porosity ss; 15:12 conn @ 1290' missed sample due to discussion w/Halliburton rep & delivery of 3 water samples to be analyzed by Halliburton lab in Grand Junction; 15:36 conn @ 1310' no shows from maroon, green & white fine grain low porosity ss; 15:55 conn @ 1330' no shows from variegated fine grain low porosity ss; Significant water production increase to 8 bbls per hr and drilling break in last 5' from salmon fine grain porous ss; Top of Wingate Ss 1325'; 16:00 stopped drilling to allow well to fill with water and set up to unload and drill out to TD on May 21; TOH 26½ stds; 16:45 Propetroco crew off location; Drilled 440' in about 5 hrs (avg 80 ft/hr); TD 1330'; SDFN

2010-05-21 07:30 Propetroco crew on location to begin rig service; 08:45 lit igniter, TIH 12 stds & unloaded water in well from 720' by building 140 psi on hole with rig compressor indicating 310' of fluid above bit & fluid level near 410'; No shows; 09:15 TIH remaining stds plus single jt, made up Kelly rod, went to bottom & found 2' fill; Unloaded lower part of well & circulated clean; No shows; **09:25 caught water sample of overnight infill from Morrison Mbrs, Summerville Fm, Entrada Ss, Kayenta Fm & top few feet of Wingate Ss (Halliburton lab test W180 May 22 SG at 60° F 1.020, pH 7.5, Rw 0.34 ohm-meter and calculated TDS 35,220 ppm);** 19:35 reconn @ 1330' & commenced drilling; 10:01 conn @ 1350' no shows from variegated shale & salmon fine grain porous ss below 1340'; 10:16 conn @ 1370' no shows from salmon fine grain porous ss; 10:25 conn @ 1390' no shows from salmon fine grain porous ss; 10:41 conn @ 1410' no shows from salmon fine grain porous ss; 10:53 conn @ 1430' no shows from salmon fine grain porous ss; **Water production increased from the 4 or 5 bbls per hr of previous day to 30 to 40 bbls per hr (720 to 960 bbls per day);** 11:10 conn @ 1450' no shows from salmon fine grain porous ss; 11:26 conn @ 1470' no shows from salmon & less porous maroon fine grain ss; 11:40 conn @ 1490' no shows from salmon fine grain porous ss; 11:58 conn @ 1510' no shows from salmon fine grain porous ss; 12:20 conn @ 1530' no shows from salmon fine grain porous ss; **Water production surging up to 60 bbls per hr (1,440 bbls per day)** 12:41 conn @ 1550' no shows from salmon & less porous maroon fine grain ss; 12:56 conn @ 1570' no shows from less porous maroon & salmon fine grain ss; 13:15 conn @ 1590' no shows from low porosity maroon fine grain ss & shale; 13:35 conn @ 1610' no shows from salmon & less porous maroon fine grain ss; 13:50 conn @ 1630' no shows from less porous maroon & salmon fine grain ss; 14:11 conn @ 1650' no shows from low porosity maroon fine grain ss & shale; 14:36 conn @ 1670' no shows from low porosity maroon fine grain ss & shale; 14:55 conn @ 1690' no shows from low porosity salmon & maroon fine grain ss & shale & dark red shale in lower 2'; Top of Chinle Fm 1688'; 15:16 conn @ 1710' no shows from maroon, dark red & green shale; **15:25 caught water sample while drilling 1705-15' in Chinle Fm (Halliburton lab test W181 May 22 SG at 60° F 1.014, pH 7.6, Rw 0.38 ohm-meter and calculated TDS 52,763 ppm);** Resistivity of water sample was 0.366 ohm-meters at 80° F similar to the resistivity of a 15,000 ppm pure NaCl solution; 15:30 reached TD @ 1730' no shows from dark red shale; 15:54 circulated hole clean & began TOH in preparation for logging on May 22; 17:30 Propetroco crew off location; Drilled 400' in about 6 hrs (avg 67 ft/hr); TD 1730'; SDFN

2010-05-22 18:00 Propetroco owner/driller Terry Leach on location to assist open hole logging operations by Halliburton; 19:30 Halliburton logging crew on site; Rigged up tools with minor problems due to shifted stds of racked drill pipe & collars in derrick; 20:30 measured 3' of fill in well with logging tools; 21:16 began logging triple combination True Resistivity, Spectral Density and Dual Spaced Neutron logs in formation water; 23:00 Halliburton tools laid down and Propetroco owner/driller off location; 23:30 Halliburton delivered 8 sets of triple logs and 6 sets of Borehole Volume Plot to Dave Allin and Tom Warnes plus digital files to Halliburton long string cementers & Dave Allin; TD 1730'; SDFWE

2010-05-23 01:00 Halliburton off location; 08:15 arrangements for open hole swab testing cancelled in favor of running & cementing long string casing due to verification of brine water in the Wingate Ss proposed injection interval; **Open hole log tops depths and elevations measured from 4874' KB elevation:**

Dakota Sandstone (Kd)	11'	+4863'
Cedar Mountain Fm (Kcm [K-1])	109'	+4765'
Morrison Fm		
Brushy Basin Member (Jmbb [K-0])	180'	+4694'
Salt Wash Member (Jmsw)	552'	+4322'
Tidwell Member (Jmt)	826'	+4048'
Summerville Fm (Js [J-5])	850'	+4024'
Curtis Fm		
Moab Tongue Member (Jctm)	885'	+3989'
Entrada Sandstone		
Slick Rock Member (Jes [J-3])	992'	+3882'
Kayenta Fm (Jk [J-2])	1143'	+3731'
Wingate Sandstone (Jw)	1342'	+3532'
Chinle Fm (Trc [J-0])	1679'	+3195'

The static fluid level logged in the well was 525'; Formation water resistivity (Rw) calculations made from the open hole logs for a representative layer of the Entrada Ss aquifer in the Jctm 962-66' with 26% porosity & 3 ohm-meters deep resistivity at 81° F estimated formation temperature indicated an equivalent pure NaCl solution of 23,000 ppm; **Rw calculations made from the open hole logs for a representative layer of the upper Wingate Ss aquifer (part of the proposed injection interval) 1346-94' with 22% porosity & 4 ohm-meters deep resistivity at 81° F estimated formation temperature indicated an equivalent pure NaCl solution of 22,500 ppm;** These calculations conformed favorably with the analyses of water samples collected while drilling and from overnight fill up reported earlier; TD 1730'; SDFWE

2010-05-24 08:00 High winds caused full day delay of laying down drill pipe; Casing crew and long string cementing ops schedule amended; Halliburton delivered DV tool and plug; TD 1730'; SDFWE

2010-05-25 07:30 Propetroco crew began laying down drill collars and drill pipe; 14:00 Weatherford casing crew on location; Preparations were begun to run casing but the power tongs deployed were too large to work safely on the rig; Work delayed until following day when more compact power tongs that have been previously used on Propetroco Rig 1 could be delivered; TD 1730'; 16:00 SDFN

2010-05-26 07:30 Began running 5.5" J-55 15.5 ppf long string with guide shoe on bottom, first centralizer clamped above the guide shoe, float collar on top of first jt (45'), second centralizer clamped above the float collar, additional centralizers on each following collar, DV tool 430' above guide shoe to land at 1300' KB and centralizers on every other collar until casing string was landed at 1730' KB; 10:00 Halliburton cementers on location; 14:50 Casing crew RD & began first stage LS cement operations; 14:58 Pumped 49 bbls water down the casing to ensure circulation; 15:17 Pumped 18.8 bbls first stage cement composed of 50 sks mixed to yield 2.11 cuft/sk Halliburton Versacem™ System 12.3 ppg slurry; 15:34 dropped first stage plug; 15:55 completed displacement of 42 bbls of water after some pump inlet blockage problems & bumped the plug in the float collar with 1,575 psi; 16:03 Bumped plug again with 1,610 psi after well went on vacuum & unknown volume of water was used to refill well; 16:20 Dropped DV tool opening device and opened the tool with 670 psi; 16:22 Circulated well with 60 bbls of water (broke circulation after first 10 bbls); 16:56 First stage completed & planned to pump second stage the following day; Cementers remained on location overnight; TD 1730'; 18:00 SDFN

2010-05-27 02:00(?) Cementers filled casing with 32 bbls water; 04:46 Cementers filled casing with 19 bbls water; 7:30 Propetroco crew on location; 09:00 Called off second stage cement operations to condition well with mud to minimize additional fluid losses; 11:00 Cementers RD & off location; Changed blooie line out & added flow line to steel mud pit & mixed mud; TD 1730'; 17:30 SDFN

2010-05-28 07:30 Propetroco crew on location; Mixed mud, filled casing with 21 bbls & circulated to condition formation for second stage cement; Casing was left full; TD 1730'; 14:00 SDFWE

2010-05-29 Memorial Day weekend; TD 1730'; SDFWE

2010-05-30 Memorial Day weekend; TD 1730'; SDFWE

2010-05-31 09:30 Conditioned mud (8.6 ppg with 48 viscosity) & circulated well through DV tool; 11:30 shut down pump to check on loss; Mud loss after was 1" from pit or about 8 bbls; TD 1730'; 12:30 SDFN

2010-06-01 Well appeared to be conditioned properly for further cementing operations & Halliburton was notified to pump second stage LS cement on the following day; No operations; 1730' TD; SDFN

2010-06-02 06:30 Halliburton cementers on location; 07:30 Propetroco crew on location to RU cementers to pump second stage of LS cement; 09:24 Began pumping 40 bbls water spacer & broke circulation after 4.5 bbls; 09:51 Dropped plug after pumping 7 bbls of 12.8 ppg Halliburton Versacem™ System slurry composed of 20 sks to yield 2.00 cuft/sk; 10:00; Landed plug at 75 psi & bumped plug in DV tool with 1,380 psi after pumping 31 bbls water for displacement; Good circulation throughout job; 11:05 Cementers left location; Propetroco crew nippled down 11" rotating head & blooie line & nippled up 7" rotating head; 1730' TD; 15:45 SDFN

2010-06-03 07:30 Propetroco crew on location; PU 4.75" PDC bit, Bit 3, cleaned casing out through the DV tool & on down to 1680' & TOH; 1680' PBTD; 15:45 SDFN

2010-06-04 07:30 Propetroco crew on location; Rigged up Rocky Mountain Wireline Service & recorded Sector Bond (CBL)/GR/CCL log; Verified excellent cement bond from PBTD to 1480' & good cement bond from 1480' to 1336' covering the Wingate Ss, little or no cement from 1336' to the DV tool at 1300' and fair to good cement bond from 1300' to 900' at the top of the Entrada Ss; 12:00 RMWS RD & left the location; 1680' PBTD; 12:00 SDFWE

2010-06-05 1680' PBTD; SDFWE

2010-06-06 1680' PBTD; SDFWE

2010-06-07 08:00 Propetroco crew off while perforation plan was formalized and Utah DOGM was polled for guidance re additional cement work; 1680' PBTD; WOO

2010-06-08 08:00 Propetroco crew off while perforating contract was arranged; Updated Drilling/Completion report & transmitted to Utah DOGM; 1680' PBTD; WOO

2010-06-09 07:30 Propetroco crew rigged a 2.375" x 5.5" J-Type tubing packer on a 10' long 2.375" pup jt with a tee for blow down valve & gauge point & set it in the top of the 5.5" casing; 09:00 Rocky Mountain Wireline Service on location to RU for perforating ops; 10:00 The rig pump was used to fill the pup jt & packer assembly and pressurize it and the casing to 300 psi; 10:05 Pressure test good for first five minutes and then packer began leaking; Scheduling constraints precluded an overhaul or replacement of the packer; 10:50 RU RMWS sheaves on rig; 11:15 RMWS began first perforating run; 13:00 RMWS completed perforating ops in 5 runs & began RD; **Perforations were made in 11 zones in the Wingate Ss over the gross interval 1344-1631' (per 5-22-10 Halliburton triple) with 21 gram Owen Superhero charges loaded in 3.125" expendable, scalloped casing guns 4 spf phased 90° for a total of 552 .37" holes & optimal 43" penetration as follows:**

1344-1418'
1422-26'
1451-59'

1478-82'
1486-90'
1498-1506'
1513-17'
1526-30'
1543-53'
1560-68'
1621-31'

12:15 The fluid level in the well retreated to 200' between the third and fourth perforating runs; 13:45 unloaded fluid from csg w/285 psi air pressure after TIH w/bit and 27 stds of drill pipe with Kelly down to 1110' indicating that the fluid level in the csg was near 460'; 14:50 TIH 7 stds with Kelly down to 1360' & unloaded csg after 2 minutes of building air pressure; 15:07 TIH remaining 8 stds with bit set near 1660' or 20' above PBTD, unloaded csg & began circulation with air at 150 psi for production test; Air circulation produced water from the perforations at a rate near 15 gpm; Fluid recovery included mud, mud filtrate, displacement water from cementing & some formation water; **16:00 Collected water sample from flow line** & ended circulation after recovering about 50 bbls of fluid from unloading the csg & circulating the csg with air; 17:00 Allin dropped off water sample at Halliburton lab for analysis **(Halliburton lab report W200 June 10 SG at 60° F 1.009, pH 8.0, Rw 0.65 ohm-meter and calculated TDS 10,155 ppm)**; 1680' PBTD; SDFN

2010-06-10 07:30 Propetroco crew on location; 08:55 Completed TOH 5 stds & unloaded csg from 1460' with 280 psi air pressure indicating the fluid level in csg was near 820'; 09:02 completed TIH 5 stds to reset bit at 1660' & unloaded csg then began circulation with air at 150 psi to continue production test; Fluid recovery included mud, mud filtrate, displacement water & formation water; 3.5" tbg string delivered to the site; 09:40 fluid flow rate 13 gpm or 446 bpd from flow line; 10:40 fluid flow rate 13 gpm or 446 bpd; 11:40 fluid flow rate 11 gpm or 377 bpd; 12:40 fluid flow rate 12 gpm or 411 bpd; Fluid noticeably more saline; 13:40 fluid flow rate 12 gpm or 411 bpd; **14:40 fluid flow rate 11.5 gpm or 394 bpd & caught water sample in presence of Bart Kettle-Utah DOGM;** 14:45 shut down production testing operations; 15:40 Allin dropped off water sample at Halliburton lab for analysis **(Halliburton lab report W201 June 10 SG at 60° F 1.013, pH 7.8, Rw 0.36 ohm-meter and calculated TDS 34,378 ppm)**; 1680' PBTD; SDFN

2010-06-11 Operations suspended until information from testing could be analyzed & forwarded to Utah DOGM for consideration & a production packer could be lined up; 1680' PBTD; WOO

2010-06-12 1680' PBTD; SDFWE

2010-06-13 1680' PBTD; SDFWE

2010-06-14 07:30 Propetroco crew on site; TOH laying down drill pipe in preparation for setting permanent production packer; Fluid level appeared to be near 600'; Westwater Farms support crew prepared 3.5" tubing string; 15:00 shut down for day; 1680' PBTD; SDFN

2010-06-15 07:30 Propetroco crew on site; RU Rocky Mountain Wireline Service to position anchor & set permanent packer in the csg; Lance Messinger-DownholeTool Service on site with the permanent packer & setting instructions; The permanent packer was set with the hanger at 1272' and top of packer at 1269'; RD RMWS and SDFN; 1680' PBTD

2010-06-16 07:30 Propetroco crew on site; RU Weatherford crew to run tubing, but they had to delay to exchange tongs for more compact equipment suitable for use on the rig; Ran 3.5" EUE 9.3 ppf slightly used tbg with nipple on end to engage permanent packer to a point just above the packer; Circulated the formation water out of the csg and replaced it with water treated with corrosion inhibitors; Engaged the tbg into the packer, stretched out tbg & set the slips in the tbg head. Cut off the tbg & welded on a bell nipple; 1680' PBTD; SDFN

2010-06-17	Operations suspended pending issuance of an approval from Utah DOGM to convert the Harley Dome 1 for injection; Transmitted updated copy of daily reports to Utah DOGM; 1680' PBTD; WOO
2010-06-18	07:30 Propetroco crew on site; Rigged down, moved rig off substructure & hauled drill pipe to yard; Operations suspended pending issuance of an approval from Utah DOGM to convert the Harley Dome 1 for injection; 1680' PBTD; WOO
2010-06-19	Operations suspended pending issuance of an approval from Utah DOGM to convert the Harley Dome 1 for injection; 1680' PBTD; WOO
2010-06-20	Operations suspended pending issuance of an approval from Utah DOGM to convert the Harley Dome 1 for injection; 1680' PBTD; WOO
2010-06-21	Allin met with Chris Kierst, Dustin Doucet & Clint Dworshak at Utah DOGM office to obtain guidance on steps necessary to obtain approval for conversion for injection; Operations suspended pending issuance of an approval from Utah DOGM to convert the Harley Dome 1 for injection; 1680' PBTD; WOO
2010-06-22	Solicited proposals from contractors to perform remedial cement work on Harley Dome 1 to bring cement to the surface behind 5.5" LS csg; Operations suspended until remedial cement work is organized; 1680' PBTD; WOO
2010-06-23	Evaluated & corrected proposals from contractors to perform remedial cement work on Harley Dome 1 to bring cement to the surface behind 5.5" LS csg; Operations suspended until remedial cement work is organized; 1680' PBTD; WOO
2010-06-24	Evaluated & corrected proposals from contractors to perform remedial cement work on Harley Dome 1 to bring cement to the surface behind 5.5" LS csg; Operations suspended until remedial cement work is organized; 1680' PBTD; WOO
2010-06-25	Evaluated & corrected proposals from contractors to perform remedial cement work on Harley Dome 1 to bring cement to the surface behind 5.5" LS csg; Operations suspended until remedial cement work is organized; 1680' PBTD; WOO
2010-06-26	Evaluated & corrected proposals from contractors to perform remedial cement work on Harley Dome 1 to bring cement to the surface behind 5.5" LS csg; Operations suspended until remedial cement work is organized; 1680' PBTD; WOO
2010-06-27	Evaluated & corrected proposals from contractors to perform remedial cement work on Harley Dome 1 to bring cement to the surface behind 5.5" LS csg; Operations suspended until remedial cement work is organized; 1680' PBTD; WOO

Carol Daniels - Completion ops supplement Harley Dome 1; 43-019-31622

19S 25E 10

From: "David L Allin"
To: "Carol Daniels"
Date: 7/5/2010 8:34 PM
Subject: Completion ops supplement Harley Dome 1; 43-019-31622
CC: "Tom Warnes" , "James Patterson" , "Wayne Stout" , "Terry Leach"
Attachments: "Tom Warnes" , "James Patterson" , "Wayne Stout" , "Terry Leach"

Carol,

I hope you had a wonderful weekend, although the big summer holiday over there is still a couple weeks away. I mailed a copy of the supplemental CBL for this well to your attention last Friday so it should show up tomorrow on Tuesday. The supplement to the completion ops report is attached hereto.

Best wishes,

Dave
Consultant to Westwater Farms, LLC

David L. Allin
Vice President, Exploration Manager
Del-Rio Resources, Inc.
AAPG DPA Certified Petroleum Geologist 2934
Professional Geologist Utah DOPL 5526699-2250
475 Seasons Drive
Grand Junction, CO 81507-8749
970-254-3114
allinpro@bresnan.net

RECEIVED
JUL 05 2010
DIV. OF OIL, GAS & MINING

Daily Completion Report Supplement 2010-07-05-20:15
Westwater Farms, LLC Harley Dome 1 Injection Well, API No. 43-019-31622
600.5' fnl and 2,139' fel (NWNE) Section 10, T19S, R25E, SLM, Greater Cisco Field, Grand County, Utah
Graded Ground Level (GL and Permanent Datum) Elevation 4,864' and Kelly Bushing (KB) Elevation 4,874'
All depths cited are drilling depths prior to open-hole logging
Submitted by David L. Allin, Well Construction Consultant to Westwater Farms, LLC

2010-06-28 07:30 Propetroco crew on site; Worked on site to be ready to lay down 3.5" tbg string; 13:30 completed fabrication of 3.5" lifting sub, removed slips from tubing head & backed out of permanent packer; 16:30 RMWS on site to RU to perf for cmt squeeze; 17:05 completed laying down 40.5 3.5" tbg jts; 17:25 TIH w/perf gun; 17:30 found fluid level near 600'; 17:42 perfed 5.5" J-55 15.5 ppf csg 858-62' 1 spf w/12 gram charges & TOH; 18:05 began 4.767" gauge ring run; 18:13 completed gauge ring run without incident & found fluid level near 500' on trip out; 18:30 Propetroco crew off location; 18:45 RMWS crew off location; 19:05 Allin notified Bart Kettle-Utah DOGM of possible cmt squeeze operations scheduled for following day if retrievable bridge plug (RBP) & squeeze packer could be delivered & positioned in a timely manner; TD 1680' PBTD; SDFN

2010-06-29 09:00 Allin on location & removed valves & nipples from surface csg head to be moved up to tbg head following cmt squeeze work; 11:10 Propetroco crew on site with equipment to run cmt squeeze tools on drill pipe; Completed adjustment to primary clutch on rig; 13:00 repositioned rig over wellhead; 13:30 Halliburton tool hand on site with RBP, squeeze (RTTS) packer, crossovers, running tools & spares for each; 14:30 began running RBP but lack of weight to push it into csg required pulling drill pipe into csg with rig pulldown chains; 15:00 fifth jt of drill pipe added enough weight to move RBP down csg; 17:00 RBP set with drill pipe at 940' (near 945' KB with rig off substructure); 17:25 completed TOH w/drill pipe; 17:40 poured 170 lbs of 20/40 frac sand in csg to cover RBP w/12' of sand; 18:00 PU squeeze packer & began TIH; 18:54 completed setting packer w/drill pipe at 780' (near 785' KB); 19:00 Propetroco crew off location; Allin notified Bart Kettle-Utah DOGM of cmt squeeze ops scheduled for following day; TD 1680' PBTD; SDFN

2010-06-30 08:05 Allin on location & found Propetroco crew, water transport & Halliburton cmt pump crew already on site; Hunted for crossover to drill pipe from 2" NPT to connect Halliburton pump; 09:00 Bart Kettle-Utah DOGM on site; RU Halliburton & make final adjustments to cmt squeeze plan to correctly account for use of drill pipe & include 5 bbls of 17 ppg slurry to be pumped to set behind perfs; 10:30 held pre-job safety meeting; 10:59 Halliburton began pressure test of their equipment; 11:03 began injection test w/fresh water @ 2 bpm & injected a total of 7 bbls; 11:11 began pumping squeeze cmt composed of 140 sks to yield 21 bbls of 15.8 ppg slurry w/volume of 1.16 cuft/sk & 5 bbls of 17 ppg slurry; 11:23 began to pump 4.5 bbls fresh water displacement to follow the 26 bbls of squeeze cmt slurry; 11:26 shut in well with 2" valve mounted on top of drill pipe; Good returns throughout all pumping stages accomplished at 2 bpm; Returns included brine water from the Morrison Fm introduced by overnight fill after squeeze perfs were made followed by drilling mud & ending with injection test water with slight signs of cmt; Losses to the formation appeared to be minimal; 14:00 Halliburton crew RD and off location; 15:45 following 4.25 hrs to allow cmt to cure began ops to unset and remove packer; 16:35 after adjustment to rig hoist clutch & adding supplemental air pressure supply, squeeze packer was freed and began TOH after a tight pull for 12'; 18:00 completed TOH & laid down squeeze packer; Tight conditions appeared to be caused by rough rusty casing & shredded rubber packing elements from the squeeze packer; TD 1680' PBTD; WOC

2010-07-01 No operations; TD 1680' PBTD; WOC

2010-07-02 07:30 Propetroco crew on site; RU to drill out perf/squeeze site above 862' KB; 08:45 PU 4.75" rerun PDC bit & began TIH; 09:40 after TIH to 580' made up Kelly rod & unloaded displacement water from csg with rig compressor; 09:45 TIH to 780' made up Kelly rod & unloaded water from csg; 09:54 began drilling out cmt by picking up first single jt of drill pipe; 10:15 contacted cmt top near 830' KB & began drilling out cmt; 10:30 drilled through cmt near 864' KB; Found some cmt in csg below

perf/squeeze site to drill then TIH w/two drill pipe stds to tag up on top of sand over RBP at 936' KB; 11:05 began TOH with bit; 11:30 laid down bit; 11:35 began refilling csg w/fresh water for pressure test; 12:20 RU for pressure test using rig pump; Pumped up to 250 psi & held for 12 minutes; 12:42 attempted to increase pressure to 300 psi but leak began in rig plumbing downstream from pump outlet before Kelly hose; 13:00 RU RMWS to acquire supplemental CBL over cmt squeeze area; 14:00 completed acquisition of log & RD RMWS; Log tied at the top of the Entrada SS by Gamma Ray curve & indicated good cement from squeeze perfs over the entire Morrison Fm from 864' KB, across the 9.625" surface csg shoe at 224' KB & on up to 98' KB; 14:20 RMWS & Propetroco off site; 16:30 Allin picked up final copies of supplemental CBL & mailed one to Utah-DOGM; TD 1680' PBTD; SDFWE

2010-07-03 No operations over Independence Day holiday weekend; TD 1680' PBTD; SDFWE

2010-07-04 No operations over Independence Day holiday weekend; TD 1680' PBTD; SDFWE

2010-07-05 No operations over Independence Day holiday weekend; Updated completion operations report & transmitted copy to Utah DOGM; TD 1680' PBTD; SDFWE

Carol Daniels - Harley Dome 1; 43-019-31622 ops rpt 19S 25E 10

From: "David L Allin"
To: "Carol Daniels"
Date: 7/17/2010 2:54 PM
Subject: Harley Dome 1; 43-019-31622 ops rpt
CC: "Tom Warnes" , "James Patterson" , "Wayne Stout" , "Terry Leach"
Attachments: "Tom Warnes" , "James Patterson" , "Wayne Stout" , "Terry Leach"

Carol,

I have attached an updated daily operations report supplement and annotated report of the step-rate injection and internal mechanical integrity tests that was performed on the well earlier this week. Enjoy the big weekend coming up.

Dave
Consultant to Westwater Farms, LLC

David L. Allin
Vice President, Exploration Manager
Del-Rio Resources, Inc.
AAPG DPA Certified Petroleum Geologist 2934
Professional Geologist Utah DOPL 5526699-2250
475 Seasons Drive
Grand Junction, CO 81507-8749
970-254-3114
allinpro@bresnan.net

RECEIVED
JUL 17 2010
DIV. OF OIL, GAS & MINING

Daily Completion Report Supplement 2010-07-17-15:00
Westwater Farms, LLC Harley Dome 1 Injection Well, API No. 43-019-31622
600.5' fnl and 2,139' fel (NWNE) Section 10, T19S, R25E, SLM, Greater Cisco Field, Grand County, Utah
Graded Ground Level (GL and Permanent Datum) Elevation 4,864' and Kelly Bushing (KB) Elevation 4,874'
All depths cited are drilling depths prior to open-hole logging
Submitted by David L. Allin, Well Construction Consultant to Westwater Farms, LLC

2010-07-06 07:30 Propetroco crew on site; 09:00 began TIH w/retrievable bridge plug (RBP) retriever on drill pipe & tagged up on fill at 898' KB that was presumed to be sand over the RBP at 936' KB during previous operations on July 2; Bridge could not be circulated out & was presumed to be cement in the casing; 10:44 began TOH to lay down RBP retriever & pick up 4.75" rerun PDC bit; 11:20 made up bit on sub & began TIH; 11:35 drilled about 15' of cement in two bridges & began circulating sand from 936' KB; 12:00 tagged up on RBP at 945' KB & continued circulation to remove sand; 12:50 began TOH w/bit; 13:00 spotted first 500 bbl frac tank for step-rate testing water supply & began filling same; 13:20 broke off bit & made up RBP retriever on drill pipe; 13:25 began TIH w/RBP retriever; 14:07 tagged up on RBP & began circulation; 14:30 latched into RBP, reciprocated up & down & began TOH w/RBP; 15:45 returned RBP to Halliburton; 16:00 Propetroco crew off site; 16:30 Allin off site after telcon w/Tom Warnes re plans to schedule step-rate injection (SRI) & internal mechanical integrity (IMI) tests; TD 1680'PBTD; SDFN

2010-07-07 07:30 Propetroco crew on location; 08:00 began laying down drill pipe; 14:30 made preparations to run 3.5" tbg; 15:00 second 500 bbl frac tank delivered & filling with fresh water began; 16:00 Propetroco crew off location; TD 1680' PBTD; SDFN

2010-07-08 07:30 Propetroco crew on location; Ran 3.5" tbg & tagged up on permanent packer at 1270' KB; Filled casing with 30 bbls of fresh water treated with corrosion inhibitor to flush formation water down through packer site into perfs; Stabbed tbg into permanent packer & topped off backside with treated water; 16:30 Propetroco crew off site; Arrangements made to stand by for next available pumping equipment from BJ Services to perform SRI & IMI tests; Bart Kettle-Utah DOGM notified of first possible test on July 13; TD 1680' PBTD; WOE

2010-07-09 No well operations; Continued water deliveries to frac tanks; TD 1680' PBTD; WOE

2010-07-10 No operations; TD 1680' PBTD; WOE

2010-07-11 No operations; TD 1680' PBTD; WOE

2010-07-12 No operations; Bart Kettle-Utah DOGM notified that testing was scheduled; TD 1680' PBTD; WOE

2010-07-13 07:30 Propetroco crew on site; Bart Kettle-Utah DOGM on site; RU BJ Services to pump SRI & IMI tests; 10:57 began pumping fresh water down the tbg for Stage 1 of SRI at 1 bpm; 12:29 started Stage 8 **pumping at 7 bpm & induced a formation breakdown at 400 psi**; 13:10 completed 11 minutes of pumping Stage 11 at 13 bpm with pressure leveled off at 477 psi; Instantaneous shutdown pressure was 250 psi; 13:47 remaining pressure of 122 psi was bled off the tbg; 14:14 pressured up tbg x csg annulus above permanent packer to 449 psi for IMI test but pressure slowly leaked off to 420 psi; 14:42 after isolating the pump truck from the test the annulus was pressured to 439 psi; **15:08 pressure held for 26 minutes indicating good IMI;** 16:25 RD BJ Services & its pumping equipment & crew left location; 16:30 Propetroco crew off location; Considering the top perf at 1344' KB & fresh water column of that height **the pressure gradient to induce a fracture appears to be 0.73 psi/ft**; The pumping rate to induce a formation breakdown in the well appears to be between 6 and 7 bpm; The instantaneous shutdown pressure of 250 psi indicates the pressure gradient to maintain an open fracture is 0.62 psi/ft; The return to a level pumping pressure of 477 psi while pumping Stage 11 at 13 bpm is curious and may indicate participation of additional perfs that did not initially take fluid; Refer to the copy of the 3 page report from BJ Services dated July 13, 2010 with annotations by Allin; Operations suspended until

	approval for conversion to injection is obtained from Utah DOGM and all UIC permit requirements are fulfilled; TD 1680' PBTD; SI
2010-07-14	Operations suspended; TD 1680' PBTD; SI
2010-07-15	Operations suspended; TD 1680' PBTD; SI
2010-07-16	Operations suspended; TD 1680' PBTD; SI
2010-07-17	Operations suspended; Updated completion operations report & transmitted copy to Utah DOGM; TD 1680' PBTD; SI

Notes by David L. Allin
7-17-2010

STIMULATION TREATMENT REPORT

Date 13-JUL-10 District Grand Junction F.Receipt 1001649220 Customer Westwater Farms
Lease Harley Dome #1 Well Name Harley Dome #1
Field Location
County Grand State Utah Stage No 1 Well API 43-019-31622

WELL DATA Well Type: OLD Well Class: DISPOSAL Depth TD/PB: 1360 Formation:

Geometry Type	Tubular Type	OD	Weight	ID	Grade	Top	Bottom
TUBULAR	CSG	5.5	15.5	4.95	J-55	0	1764
	TBG	3.5	9.3	2.99	J-55	0	1272

Perf Intervals

Top	Bottom	SPF	Diameter
0	0	0	0
1344	1631	4	0.37"
552 holes			

Packer Type Packer Depth 1260 FT

TREATMENT DATA

Fluid Type	Fluid Desc	Pumped Volume(Gals)	Prop. Description	Volume Pumped(Lbs)
TREATMENT FLUID	Water	1000 bbls on hand 80	NO PROPPANT	

Total Prop Qty:

Previous Treatment Previous Production
Hole Loaded With Water Treat Via: Tubing [X] Casing [X] Anul. [ ] Tubing & Anul. [ ]
Ball Sealers: In Stages Type
Auxiliary Materials

LIQUID PUMPED AND CAPACITIES IN BBLS.

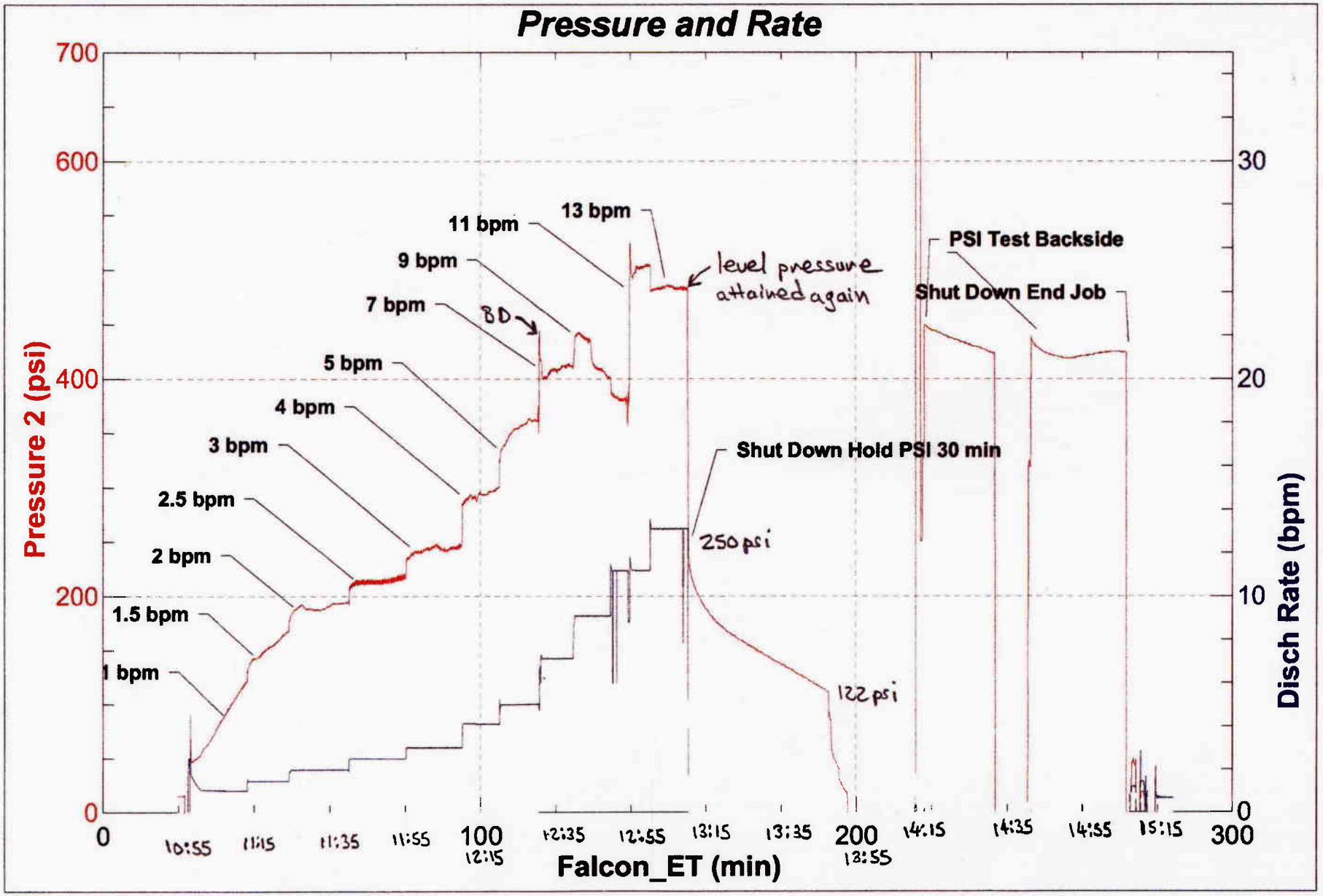
Tubing Cap.	11.5
Casing Cap.	2.38
Annular Cap.	15.24
Open Hole Cap.	5
Fluid to Load	11.5
Pad Volume	80
Treating Fluid	80
Flush	0
Overflush	0
Fluid to Recover	0

PROCEDURE SUMMARY

Time AM/PM	Treating Pressure-Psi STP	Annulus	Surface Slurry BBLS. Pumped Stage	Total	Slurry Rate BPM	Comments
		Duration (min)				
10:32						start job
10:35	2600			?		pressure test lines
10:57	120	15	1	15 17	1	pump water
11:12	169	12	2	18 23	1.5	pump water
11:24	193	15	3	30 30	2	pump water
11:39	218	15	4	38 35	2.5	pump water
11:54	245	15	5	45 45	3	pump water
12:09	298	10	6	40 45	4	pump water
12:19	360	10	7	50 40	5	pump water
12:29	412	10	8	70 65	7	pump water
12:39	441	10	9	90 60	9	pump water
12:49	503	10	10	110 60	11	pump water
12:~~49~~ 59	504	11	11	143 80	13 11	pump water
13:10	477			?		shut down hold pressure for 30min ISDP = 250 psi
13:47	122			659		bleed off pressure
14:14	449					pressure up back side IMI first attempt
14:24						isolate pump truck , try to pressure again.
14:42	439					pressure test back again IMI OK
15:08						pressure held .
15:38						end job
16:00						post safety meeting
16:25						convoy safety meeting, depart location

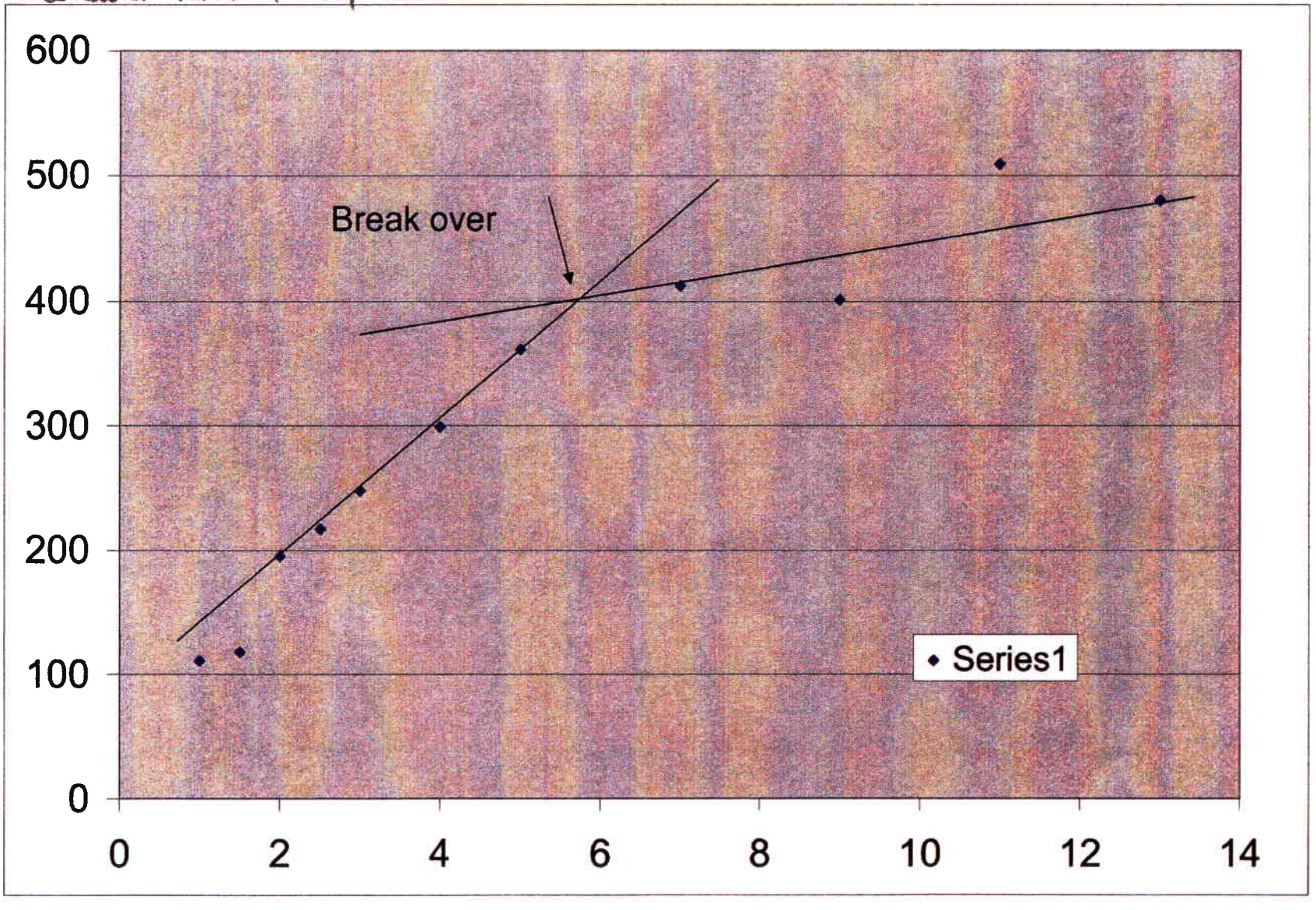
Treating Pressure		Injection Rates		Shut In Pressures		Customer Rep.	Tom Warns
Minimum	70	Treating Fluid	11	ISDP ±250	122	BJ Rep.	JOSE E CARCAMO
Maximum	449 504	Flush	80	5 Min.	0	Job Number	1001649220
Average	360	Average	6	10 Min.	0	Rec. ID No.	
Operators Max. Pressure				15 Min.	0	Distribution	
504 / 477				Final 122 In 30 Min.			
				Flush Dens. lb./gal.	8.34		

BJ Services JobMaster Program Version 3.20
Job Number: 1001649220
Customer: WestWater
Well Name: Harley Dome #1



2 of 3

Westwater Farms Harley Dome 1 43-019-31622



RECEIVED

JUL 26 2010

DIV. OF OIL, GAS & MINING

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

AMENDED REPORT ☐ (highlight changes) FORM 8

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-82619

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☐ DRY ☐ OTHER Injection/Disposal

7. UNIT or CA AGREEMENT NAME:

b. TYPE OF WORK: NEW WELL ☑ HORIZ. LATS. ☐ DEEP-EN ☐ RE-ENTRY ☐ DIFF. RESVR. ☐ OTHER

8. WELL NAME and NUMBER: Harley Dome 1

2. NAME OF OPERATOR: Westwater Farms, LLC

9. API NUMBER: 4301931622

3. ADDRESS OF OPERATOR: P.O. Box 324 CITY Cisco STATE UT ZIP 84515

PHONE NUMBER: (970) 406-1466

10. FIELD AND POOL, OR WILDCAT: Greater Cisco

4. LOCATION OF WELL (FOOTAGES)
AT SURFACE: 600.5' fnl, 2139' fel
AT TOP PRODUCING INTERVAL REPORTED BELOW: Vertical well below surface location
AT TOTAL DEPTH: Vertical well below surface location

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWNE 10 19S 25E S

12. COUNTY: Grand

13. STATE: UTAH

14. DATE SPUDDED: 5/13/2010

15. DATE T.D. REACHED: 5/21/2010

16. DATE COMPLETED: 7/13/2010 ABANDONED ☐ READY TO PRODUCE ☑

17. ELEVATIONS (DF, RKB, RT, GL): 4874' RKB, 4864 GL

18. TOTAL DEPTH: MD 1,730 TVD 1,730

19. PLUG BACK T.D.: MD 1,680 TVD 1,680

20. IF MULTIPLE COMPLETIONS, HOW MANY? *

21. DEPTH BRIDGE PLUG SET: MD TVD

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)
GR, SP, Resistivity, Density-Neutron (OH combo) 5/22/2010, CBL 6-4-2010 and CBL 7-2-2010 (all filed)

23.
WAS WELL CORED? NO ☑ YES ☐ (Submit analysis)
WAS DST RUN? NO ☑ YES ☐ (Submit report)
DIRECTIONAL SURVEY? NO ☑ YES ☐ (Submit copy)

24. CASING AND LINER RECORD (Report all strings set in well)

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED
11"	8.625" J-55	24.00	0	224		A 50	10	0' circ	
7.875"	5.5" J-55	15.50	0	1,730	1,227	G 210	52	96' CBL	

25. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
3.5"	1,270	1,270						

26. PRODUCING INTERVALS

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)
(A) Wingate Ss	1,342	1,679	1,342	1,679
(B)				
(C)				
(D)				

27. PERFORATION RECORD

INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
1,344 1,631	0.37	552	Open ☑ Squeezed ☐
			Open ☐ Squeezed ☐
			Open ☐ Squeezed ☐
			Open ☐ Squeezed ☐

28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL

29. ENCLOSED ATTACHMENTS:
☐ ELECTRICAL/MECHANICAL LOGS ☐ GEOLOGIC REPORT ☐ DST REPORT ☐ DIRECTIONAL SURVEY
☐ SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION ☐ CORE ANALYSIS ☐ OTHER:

30. WELL STATUS: SI

(5/2000)

(CONTINUED ON BACK)

31. INITIAL PRODUCTION

INTERVAL A (As shown in Item #26)

DATE FIRST PRODUCED:		TEST DATE: 6/10/2010		HOURS TESTED: 5.7		TEST PRODUCTION RATES: →	OIL – BBL: 0	GAS – MCF: 0	WATER – BBL: 105	PROD. METHOD: Circ w/air
CHOKE SIZE:	TBG. PRESS. 150	CSG. PRESS. 0	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL: 0	GAS – MCF: 0	WATER – BBL: 442	INTERVAL STATUS: Open

INTERVAL B (As shown in Item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL C (As shown in Item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL D (As shown in Item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

33. SUMMARY OF POROUS ZONES (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.
Morrison Fm	240	268	Ss bearing 31,000 ppm TDS water
Curtis Moab Mbr	885	992	Ss bearing 31,000 ppm TDS water
Entrada SR Mbr	992	1,143	Ss bearing 26-36,000 ppm TDS water
Wingate Ss	1,342	1,679	Ss bearing 53,000 ppm TDS water

34. FORMATION (Log) MARKERS:

Name	Top (Measured Depth)
Mancos Sh (Tununk Mbr)	0
Dakota Ss	11
Cedar Mountain Fm	109
Morrison Fm	180
Summerville Fm	850
Curtis Fm (Moab Mbr)	885
Entrada Ss (Slick Rock Mbr)	992
Kayenta Fm	1,143
Wingate Ss	1,342
Chinle Fm	1,679

35. ADDITIONAL REMARKS (Include plugging procedure)

Daily drilling and completion reports, produced water analysis reports and logs previously filed. Drilled for water inj/disposal.

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) David L Allin allinpro@bresnan.net 970-254-3114 TITLE Utah Prof Geologist 5526699-2250, Consultant

SIGNATURE D L Allin DATE 7/26/2010

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

** ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

(5/2000)