

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

FORM 3

AMENDED REPORT ☐  
(highlight changes)

|                                                                                                                                                                                                                             |  |                                                          |                                        |                                                                                                                                                              |                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| <b>APPLICATION FOR PERMIT TO DRILL</b>                                                                                                                                                                                      |  |                                                          |                                        | 5. MINERAL LEASE NO:<br><b>ML-49255</b>                                                                                                                      | 6. SURFACE:<br><b>State</b> |
| 1A. TYPE OF WORK: <b>DRILL</b> <input checked="" type="checkbox"/> <b>REENTER</b> <input type="checkbox"/> <b>DEEPEN</b> <input type="checkbox"/>                                                                           |  |                                                          |                                        | 7. IF INDIAN, ALLOTTEE OR TRIBE NAME:<br><b>N/A</b>                                                                                                          |                             |
| B. TYPE OF WELL: <b>OIL</b> <input type="checkbox"/> <b>GAS</b> <input type="checkbox"/> <b>OTHER</b> <u>Injection</u> <b>SINGLE ZONE</b> <input type="checkbox"/> <b>MULTIPLE ZONE</b> <input checked="" type="checkbox"/> |  |                                                          |                                        | 8. UNIT or CA AGREEMENT NAME:<br><b>N/A</b>                                                                                                                  |                             |
| 2. NAME OF OPERATOR:<br><b>Summit Operating, LLC</b>                                                                                                                                                                        |  |                                                          |                                        | 9. WELL NAME and NUMBER:<br><b>Westwater State 4-2-19-25</b>                                                                                                 |                             |
| 3. ADDRESS OF OPERATOR:<br><b>2064 Prospector Ave 102</b> CITY <b>Park City</b> STATE <b>UT</b> ZIP <b>84060</b>                                                                                                            |  |                                                          | PHONE NUMBER:<br><b>(435) 940-9001</b> |                                                                                                                                                              |                             |
| 4. LOCATION OF WELL (FOOTAGES)<br><br>AT SURFACE: <b>503' FNL, 502' FWL</b> <u>662-013X</u> <u>39.189432</u><br><u>43392664</u> <u>-109.124104</u><br>AT PROPOSED PRODUCING ZONE: <b>503' FNL, 502' FWL</b>                 |  |                                                          |                                        | 10. FIELD AND POOL, OR WILDCAT:<br><u>Green Cisco</u> <u>205</u><br><br>11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:<br><b>NWNW 2    19S    25E    S</b> |                             |
| 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE:<br><b>1.2 miles North and East of Harley Dome</b>                                                                                                     |  |                                                          |                                        | 12. COUNTY:<br><b>Grand</b>                                                                                                                                  |                             |
| 15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET)<br><b>502'</b>                                                                                                                                                        |  | 16. NUMBER OF ACRES IN LEASE:<br><b>160</b>              |                                        | 17. NUMBER OF ACRES ASSIGNED TO THIS WELL:<br><b>40</b>                                                                                                      |                             |
| 18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET)<br><b>See attached map</b>                                                                                                          |  | 19. PROPOSED DEPTH:<br><b>1,725</b>                      |                                        | 20. BOND DESCRIPTION:<br><b>N 23-15</b>                                                                                                                      |                             |
| 21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.):<br><b>4763' GR</b>                                                                                                                                                          |  | 22. APPROXIMATE DATE WORK WILL START:<br><b>7/1/2009</b> |                                        | 23. ESTIMATED DURATION:<br><b>28 Days</b>                                                                                                                    |                             |

| 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 |                  |                                  |
| <b>12-1/4"</b>                            | <b>9-5/8"</b>                           | <b>H-40</b>          | <b>32.3#</b> | <b>170</b>    | <b>NEAT Class A Slurry</b>                      | <b>90 Sacks</b>  | <b>1.18 cu ft/sk    15.6 ppg</b> |
| <b>8-5/8"</b>                             | <b>7"</b>                               | <b>J-55 LT&amp;G</b> | <b>23.0#</b> | <b>1,725</b>  | <b>50/50 Pozmix</b>                             | <b>141 Sacks</b> | <b>1.40 cu ft/sk    13.6 ppg</b> |
|                                           |                                         |                      |              |               |                                                 |                  |                                  |
|                                           |                                         |                      |              |               |                                                 |                  |                                  |
|                                           |                                         |                      |              |               |                                                 |                  |                                  |
|                                           |                                         |                      |              |               |                                                 |                  |                                  |
|                                           |                                         |                      |              |               |                                                 |                  |                                  |
|                                           |                                         |                      |              |               |                                                 |                  |                                  |

25. ATTACHMENTS

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

|                                                                                                |                                                                                              |
|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER | <input checked="" type="checkbox"/> COMPLETE DRILLING PLAN                                   |
| <input type="checkbox"/> EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER        | <input type="checkbox"/> FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER |

NAME (PLEASE PRINT) David Knudsen    TITLE Summit Operating, LLC

SIGNATURE [Signature]    DATE \_\_\_\_\_

(This space for State use only)

**Approved by the  
Utah Division of  
Oil, Gas and Mining**

API NUMBER ASSIGNED: 43019-31623

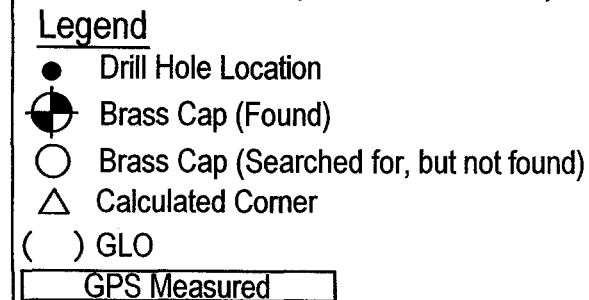
Date: 08-03-09    APPROVAL: \_\_\_\_\_

By: [Signature]    See Instructions on Reverse Side

**RECEIVED**  
**JUN 08 2009**

DIV. OF OIL, GAS & MINING

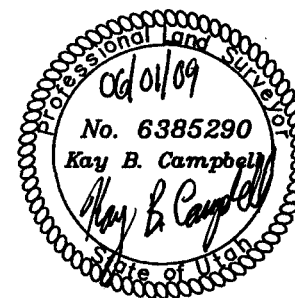
Township 19 South



1. Dimensions are GPS measured unless noted otherwise.
2. UTM and Latitude / Longitude Coordinates are derived using a GPS Pathfinder and are shown in NAD 27 Datum.

LAT / LONG  
39°11'21.886" N  
109°07'26.992" W

I, Kay B. Campbell, a Professional Land Surveyor, holding Certificate 6385290 State of Utah, do hereby certify that the information on this drawing is a true and accurate survey based on data of record and was conducted under my personal direction and supervision as shown hereon.



E-Mail [takonoctv.net](mailto:takonoctv.net)

**Westwater State #4-2-19-25**  
**Section 2, T19S, R25E, S.L.B.&M.**  
**Grand County, Utah**

Job No.  
4185

( IN FEET )

1 inch = 1000 ft.

## DRILLING PROGRAM

Attached to UDOGM Form 3

Summit Operating, LLC

**Westwater State 4-2-19-25**

NW/4 NW/4, Lot 4, Sec. 2, T19S, R25E, SLB & M

503' FNL, 502' FWL

Grand County, Utah

### 1. The Geologic Surface Formation

Tununk Member Mancos Shale

### 2. Estimated Tops of Important Geologic Markers

| KB                           | Ground + 10' |
|------------------------------|--------------|
| ✓ Dakota Sandstone           | 35'          |
| Cedar Mountain Formation     | 115'         |
| Brushy Basin Member Morrison | 180'         |
| ✓ Salt Wash Member Morrison  | 600'         |
| Tidwell Member Morrison      | 817'         |
| Summerville Formation        | 852'         |
| ✓ Slick Rock Member Entrada  | 897'         |
| ✓ Kayenta Formation          | 1145'        |
| ✓ Wingate Sandstone          | 1353'        |
| Chinle Formation             | 1687'        |
| TD Chinle Formation          | 1735'        |

### 3. Projected Gas & Water Zones

No Groundwater is anticipated to be encountered. Water encountered will be reported on a Form 7 "Report of Water Encountered During Drilling".

Casing & cementing will be done to protect potentially productive hydrocarbons, lost circulation zones, abnormal pressure zones, and prospectively valuable mineral deposits. All indications of usable water will be reported.

Surface casing will be tested to 1000 psi for 10 minutes. Pressure drop is not to exceed 150 psi.

#### 4. The Proposed Casing and Cementing Programs

##### Casing Program

| HOLE<br>SIZE | SETTING DEPTH<br>(INTERVAL) | SIZE<br>(OD) | WEIGHT, GRADE<br>& JOINT | CONDITION |
|--------------|-----------------------------|--------------|--------------------------|-----------|
| 12-1/4"      | 170'                        | 9-5/8"       | 32.3# H-40               | New       |
| 8-5/8        | 1,725'                      | 7"           | 23# J-55 LT&C            | New       |

##### Cement Program

**Only the surface casing will be cemented aback to surface.**

Surface Casing: 90 sacks NEAT Class A Slurry  
Weight: 15.6 # / gal  
Yield: 1.18 cu.ft / sk

Production Casing: 141 sacks Class H 50-50 Pozmix W/2% Bentonite &  
Pounds/sk Gilsonite  
Weight: 13.6 # / gal  
Yield: 1.40 cu.ft / sk

The following shall be entered in the driller's log:

- 1) Blowout preventer pressure tests, including test pressures and results;
- 2) Blowout preventer tests for proper functioning;
- 3) Blowout prevention drills conducted;
- 4) Casing run, including size, grade, weight, and depth set;
- 5) How the pipe was cemented, including amount of cement, type, whether cement circulated, location of the cementing tools, etc.;
- 6) Waiting on cement time for each casing string;
- 7) Casing pressure tests after cementing, including test pressures and results.

5. The Operator's Minimum Specifications for Pressure Control

See the "BOPE schematic diagram" for the blowout preventer equipment. An 11" 3,000 psi double-ram BOPE equipment with a rotating head. No annular preventer will be needed. The BOP will be tested and charted using a BOP tester and test plug to 3,000 psi for 10 minutes. All text will be recorded in the Driller's log book. Physical operation of the BOP will be checked on each trip.

6. The Type and Characteristics of the Proposed Circulating Muds

Surface hole will be drilled with air/mist/foam

Long string hole will be drilled with air/mist/foam until conditions require circulation with gel/chem. mud

7. The Testing, Logging and Coring Programs are as followed

Testing –

DST's are not planned

Logging –

End of Surface casing - TD    Gamma Ray, Density-Neutron Porosity,  
Induction, Caliper

Coring --

No coring is planned for this location

Any Anticipated Abnormal Pressures or Temperatures

No abnormal pressures or temperatures have been noted or reported in wells drilled in The area nor at the depths anticipated in this well. Bottom hole pressure expected is 700 psi max. No hydrogen sulfide or other hazardous gases or fluids have been found, reported or are known to exist at these depths in the area.

8. Anticipated Starting Date and Duration of the Operations.

The well will be drilled approx.: July 1, 2009

Verbal and/or written notifications listed below shall be submitted in accordance with instructions from the Division of Oil, Gas & Mining:

(a)    prior to beginning construction;

- (b) prior to spudding;
- (c) prior to running any casing or BOP tests;
- (d) prior to plugging the well, for verbal plugging instructions.

Spills, blowouts, fires, leaks, accidents or other unusual occurrences shall be reported to the Division of Oil, Gas & Mining immediately.

## Multipoint Surface Use Plan

Attached to UDOGM Form 3

Summit Operating, LLC

**Westwater State 4-2-19-25**

NW/4 NW/4, Lot 4, Sec. 2, T19S, R25E, SLB & M

503' FNL, 502' FWL

Grand County, Utah

### **1. Existing Roads**

- a. The proposed access road will be Constructed consistent with the State of Utah and Summit Operating, LLC, and will encroach on Grand County Road 193. County Road 193 is the main access into this area.
- b. Existing roads will be maintained in the same or better condition.

### **2. Planned Access**

Approximately 400' of new access will be required. Access is determined by acquired Right of way by the surface owner.

- a. Maximum Width: 24'
- b. Maximum grade: 10 %
- c. Turnouts: None
- d. Drainage design: 1 – 18" culvert" may be required along the new portion of the road. Water will be diverted around the road as necessary and practical.
- e. When the well is completed for injection, the road will be upgraded with a gravel surface and maintained as necessary to prevent soil erosion and accommodate year-round traffic.
- f. Existing trees will be left in place where practical to provide screening and buffer areas.

### **3. Location of Existing Wells**

- a. See Drawing L-1. There is existing well locations within a one mile radius of the proposed location.

### **4. Location of Existing and/or Proposed Facilities**

- a. When the well is completed as an injection well, water storage, oil separation, and pumping facilities will be constructed to support injection activities.
- b. All surface area of the pad will be utilized for Injection facilities and equipment. Rehabilitation of any areas not used will be made in accordance with landowner stipulations.

### **5. Location and Type of Water Supply**

- a. Water to be used for drilling will be obtained from a commercial irrigation company, Ute Water Conservancy District, from their tap in Mack, Colorado or a municipal source in Fruita, CO. and trucked to the site.
- b. Water will be transported by truck over approved access roads.
- c. No water well is to be drilled for this location.

### **6. Source of Construction Materials**

- a. Any necessary construction materials needed will be obtained locally from a private source and hauled to the location on existing roads.
- b. No construction or surfacing materials will be taken from Federal/Indian land.

### **7. Methods for handling waste disposal**

- a. A reserve pit will be constructed with a minimum of one-half the total depth below the original ground surface on the lowest point within the pit. The pit will be lined with a synthetic liner. Three sides of the reserve pit will be fenced within 24 hours after completion of construction and the fourth side within 24 hours after drilling operations cease with four strands of barbed wire, or woven wire topped with barbed wire to a height of not less than four feet. The fence will be kept in good repair while the pit is drying.



- b. Following drilling, the liquid waste will be evaporated from the pit and the pit backfilled and returned to natural grade. No liquid hydrocarbons will be discharged to the reserve pit or location.
- c. In the event fluids are produced, any oil will be retained in tanks until sold and any water produced will be retained until its quality can be determined. The quality and quantity of the water will determine the method of disposal.
- d. Trash will be contained in a portable metal container and will be hauled from location periodically and disposed of at an approved disposal site. Chemical toilets will be placed on location and sewage will be disposed of at an appropriate disposal site.

## **8. Ancillary Facilities**

- a. We anticipate no need for ancillary facilities with the exception of trailers to be located on the drill site.

## **9. Well-site Layout**

- a. Available topsoil will be removed and stockpiled as reflected on Drawing A-2. Any excess subsoil will also be stockpiled as reflected on Drawing A-2. Location of the rig, reserve and blooie pits, and drilling support equipment will be located as shown on "Rig and Equipment Layout" drawing.
- b. A blooie pit will be located in the southeast corner of the pad and 100' from the drill hole. A line will be placed on the surface from the center hole to the blooie pit. The blooie pit will not be lined, but will be initially fenced on three sides to protect livestock/wildlife.
- c. Access to the well pad will be as shown on Drawing L-1.
- d. Natural runoff will be diverted around the well pad.

## **10. Plans for Restoration of Surface**

- a. All surface areas not required for injection operations will be graded to as near original condition as possible and contoured to maintain possible erosion to a minimum.
- b. Available topsoil will be stockpiled and will be evenly distributed over the disturbed areas and the area will be reseeded as prescribed by the landowner.
- c. Pits and any other area that would present a hazard to wildlife or livestock will be fenced off when the rig is released and removed.

- d. Any oil accumulation on the pit will be removed or overhead flagged as dictated by then existed conditions.
- e. Injection facility construction will commence following the completion of the well. If the well-site is to be abandoned, all disturbed areas will be recontoured to the natural contour as is possible.

#### **11. Surface Ownership**

- a. The well-site and access road will be constructed on lands owned by the School and Institutional Trust Lands Administration, 675 East 500 South, Salt Lake City, Utah 84102-2818; 801-538-5100. The operator shall contact the landowner and the Division of Oil, Gas and Mining 48 hours prior to beginning construction activities.

#### **12. Other Information:**

- a. The primary surface use is wildlife habitat and grazing. The nearest dwelling is approximately 1.2 miles southwest. Nearest live water is in Bitter Creek, 1.8 miles South and East.
- b. If there is snow on the ground when construction begins, it will be removed before the soil is disturbed, and piled downhill from the topsoil stockpile location.
- c. The back-slope and fore-slope will be constructed no steeper than 3:1.
- d. All equipment and vehicles will be confined to the access road and well pad.
- e. A complete copy of the approved Application for Permit to Drill (APD) including conditions and stipulations shall be on the well-site during construction and drilling operations.

There will be no deviation from the proposed drilling and/or workover program without prior approval from the Division of Oil, Gas & Mining.

13. **Company Representative**

David Knudson  
Summit Operating, LLC.  
1441 Ute Blvd  
Suite 280  
Park City, Utah 84098  
1-435-940-9001

**Permitting Consultant**

Larry W. Johnson  
Talon Resources, Inc.  
195 North 100 West  
Huntington, UT. 84528  
1-435-687-5310

**Excavation Contractor**

High Desert Excavating  
P.O. Box 75  
Green River, Utah 84525  
1-435-820-0288

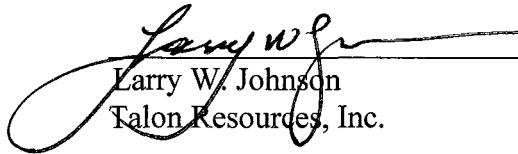
**Mail Approved A.P.D. To:**

Company Representative

14. **Certification**

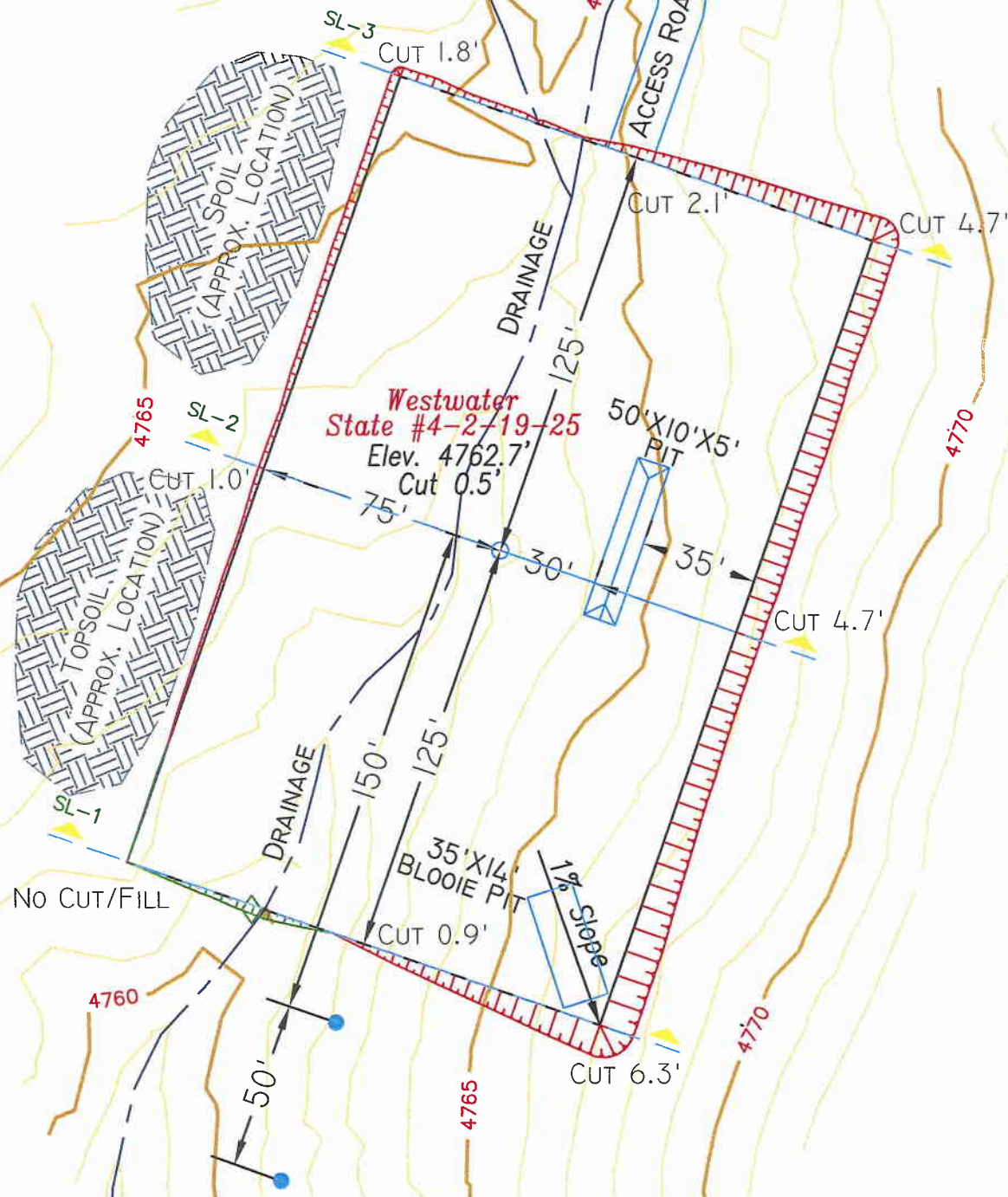
I hereby certify that I, or persons under my direct supervision have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct, and that the work associated with the operations proposed herein will be performed by Summit Operating, LLC. and its subcontractors in conformity with this plan and the terms and conditions under which it is approved.

6-3-09  
Date

  
Larry W. Johnson  
Talon Resources, Inc.

ELEVATION OF UNGRADED GROUND AT LOCATION STAKE = 4762.7'

ELEVATION OF GRADED GROUND AT LOCATION STAKE = 4762.2'



**TALON RESOURCES, INC.**

615 North 400 East P.O. Box 1230

Huntington, Utah 84528

Phone (435)687-5310 Fax (435)687-5311

E-Mail talon etv.net

**SUMMIT OPERATING**

**LOCATION LAYOUT**

**Section 2, T19S, R25E, S.L.B.&M.**

**Westwater State #4-2-19-25**

Drawn By:  
**N. BUTKOVICH**

Checked By:  
**L.W.J.**

Drawing No.

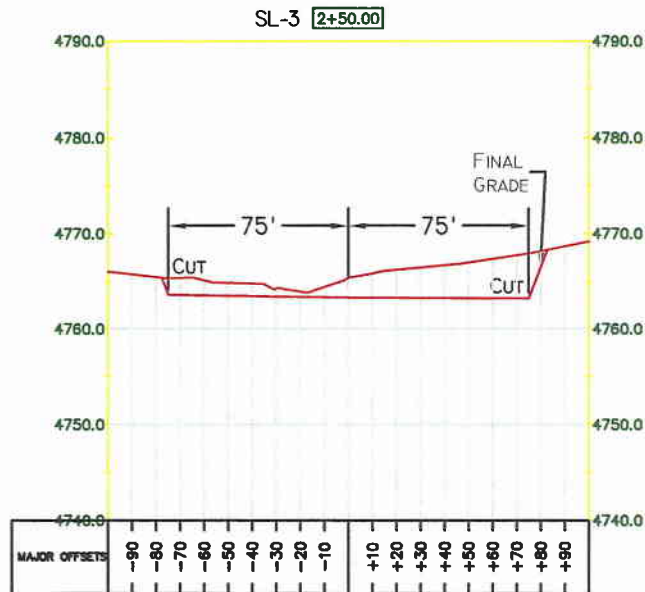
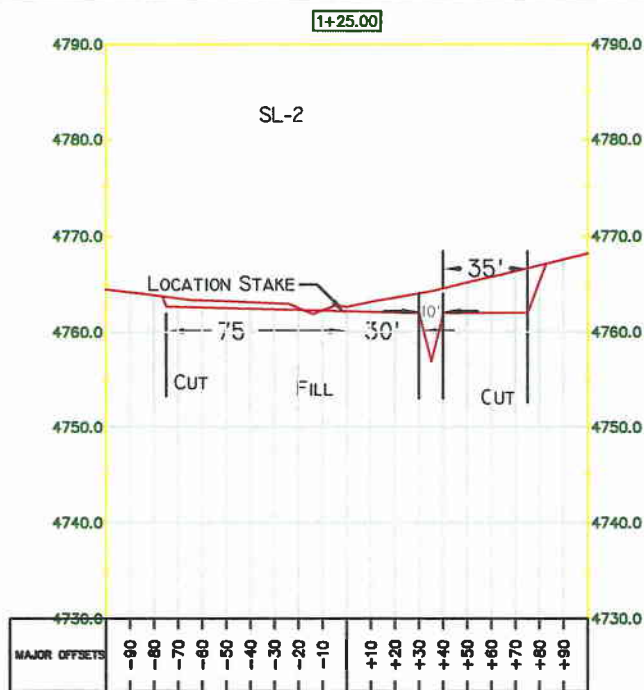
**A-2**

Date:  
**4/28/09**

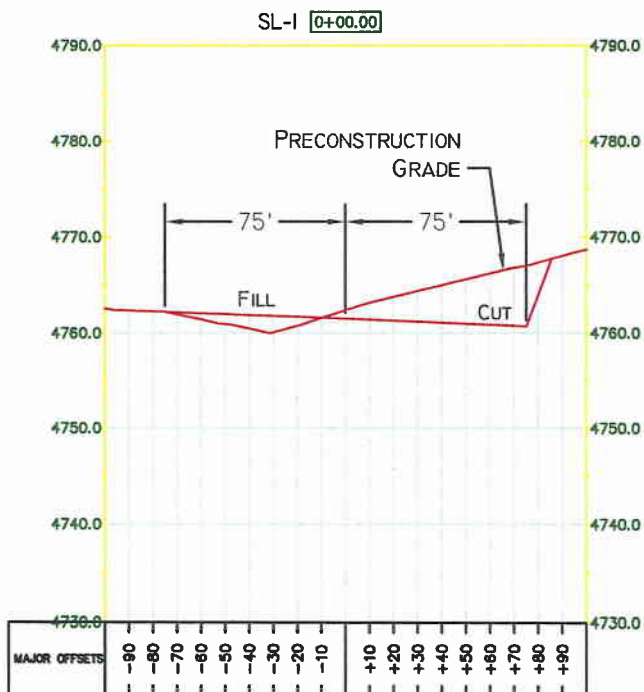
Scale:  
**1" = 50'**

Sheet **2 of 4**

Job No.  
**4185**



1"=10'  
X-Section  
Scale  
1"=40'



SLOPE = 1 1/2 : 1  
(EXCEPT PIT)  
PIT SLOPE = 1 : 1

#### APPROXIMATE YARDAGES

(6") TOPSOIL STRIPPING = 765 CU. YDS.

TOTAL CUT (INCLUDING PIT) = 2,865 CU. YDS.

TOTAL FILL = 120 CU. YDS.



**TALON RESOURCES, INC**

615 North 400 East P.O. Box 1230

Huntington, Utah 84528

Phone (435)687-5310 Fax (435)687-5311

E-Mail talon etv.net

## SUMMIT OPERATING

### TYPICAL CROSS SECTION

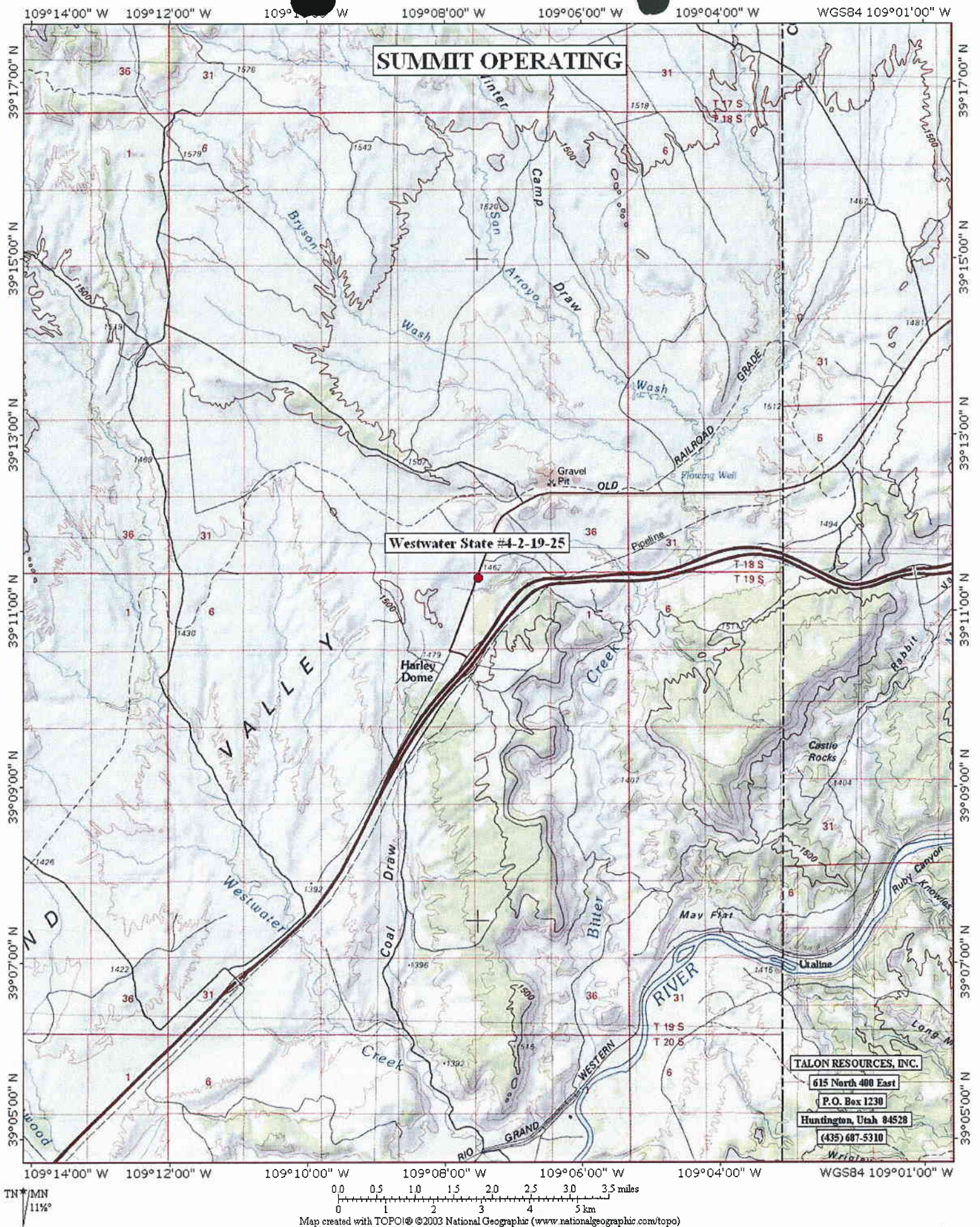
Section 2, T19S, R25E, S.L.B.&M.  
Westwater State #4-2-19-25

|                           |                       |
|---------------------------|-----------------------|
| Drawn By:<br>N. BUTKOVICH | Checked By:<br>L.W.J. |
| Drawing No.<br>C-1        | Date:<br>4/28/09      |
|                           | Scale:<br>1" = 80'    |
| Sheet 3 of 4              | Job No.<br>4185       |













Westwater State #4-2-19-25

Image © 2009 DigitalGlobe

Google

39°11'30.69"N 109°06'55.93"W

elev 1435 m

Apr 12, 2004

Eye alt 8.63 km





Westwater State #4-2-19-25

Image USDA Farm Service Agency

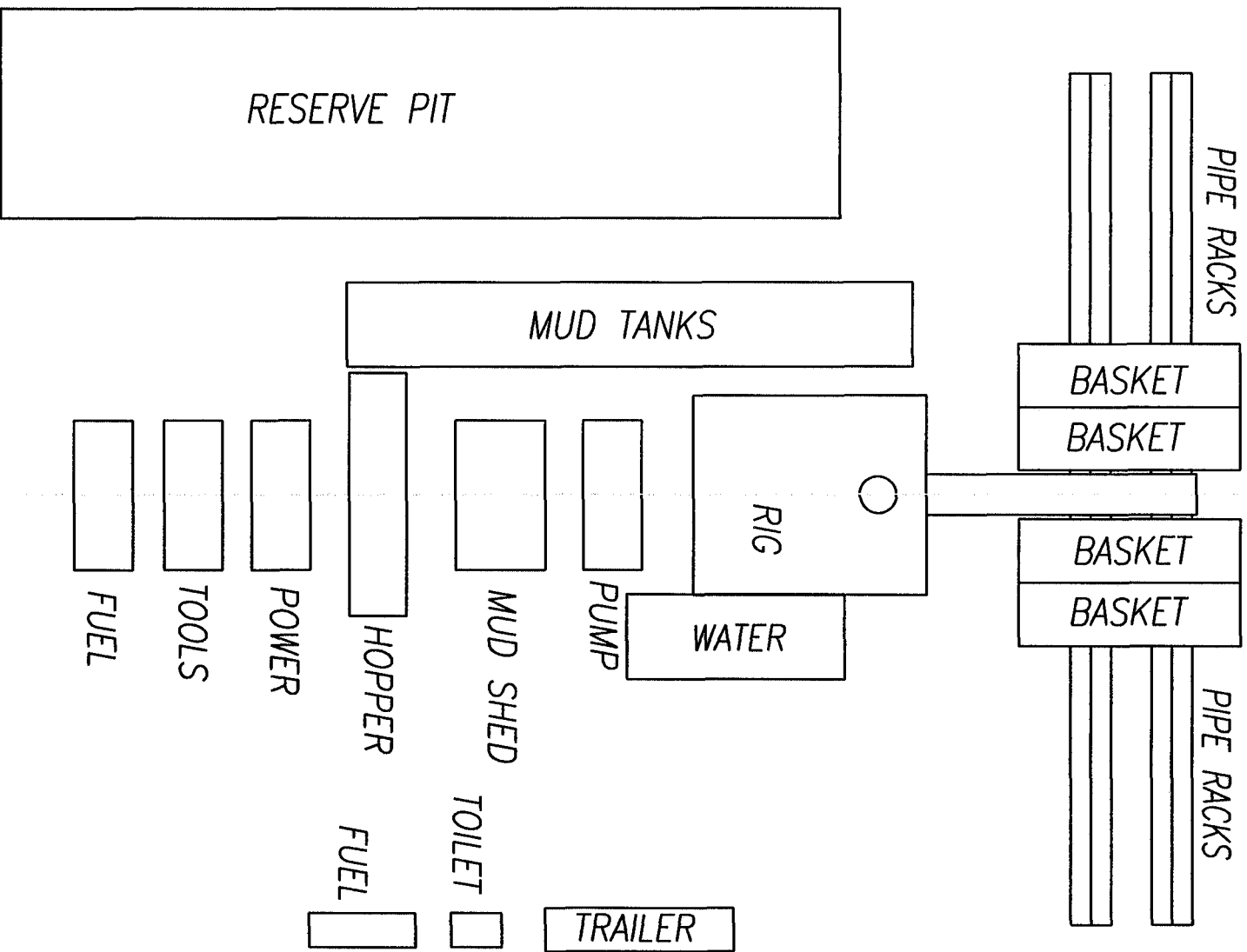
Image © 2009 DigitalGlobe

Google



# Summit Operating

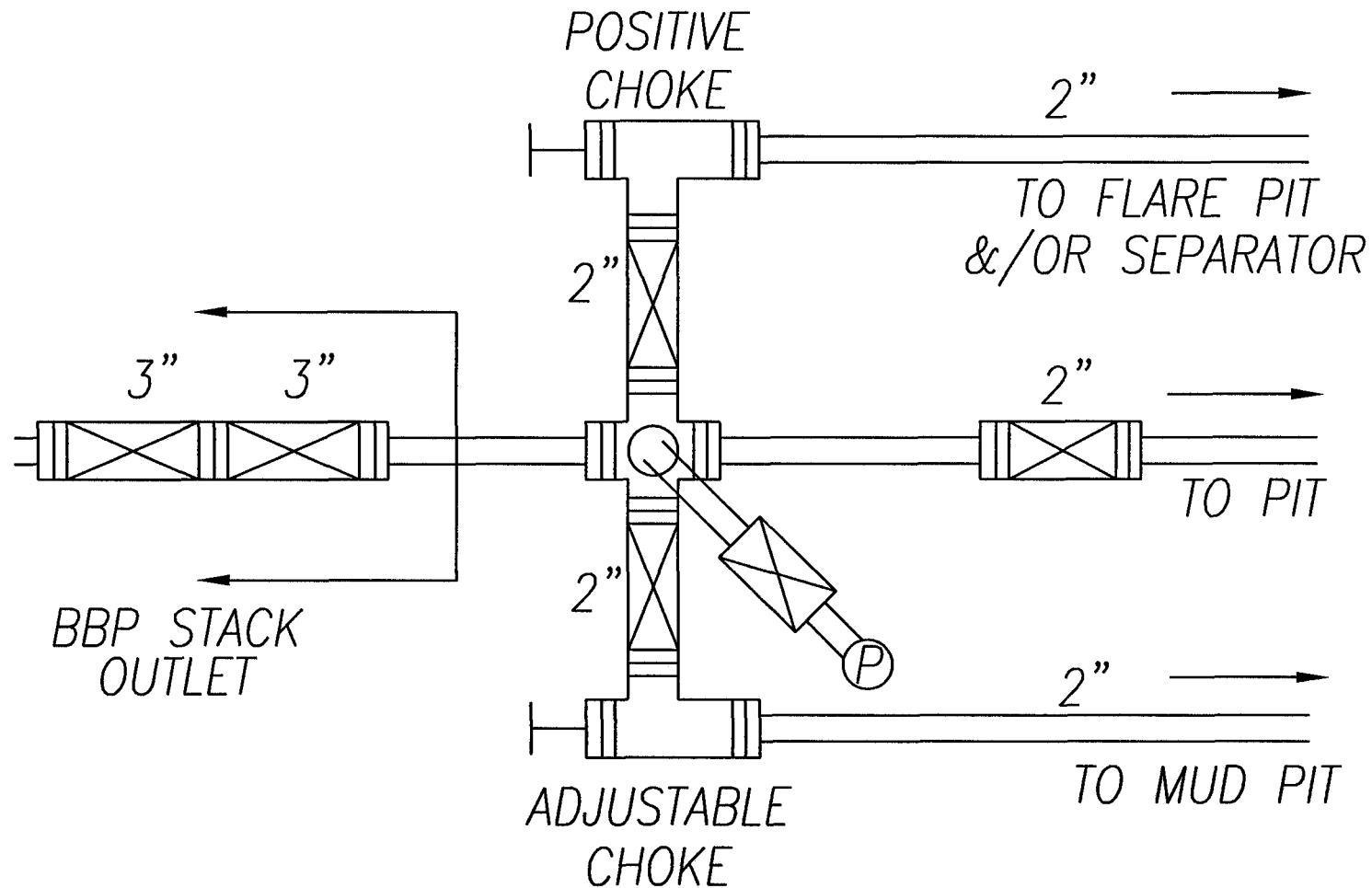
BLOOIE



RIG & EQUIPMENT LAYOUT  
(Not to Scale)

Rig and Equipment Layout

# CHOKE MANIFOLD

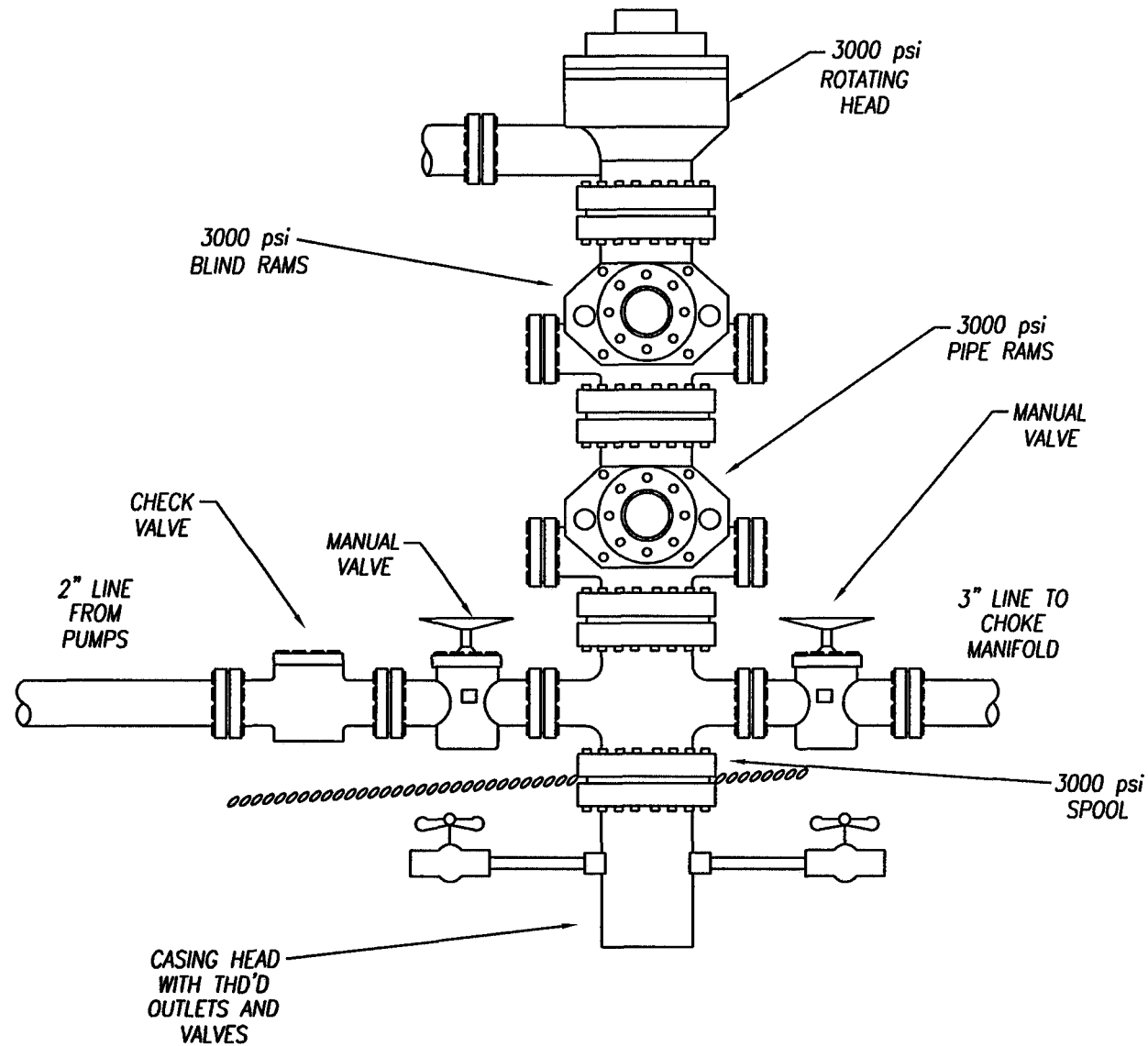


Summit Operating



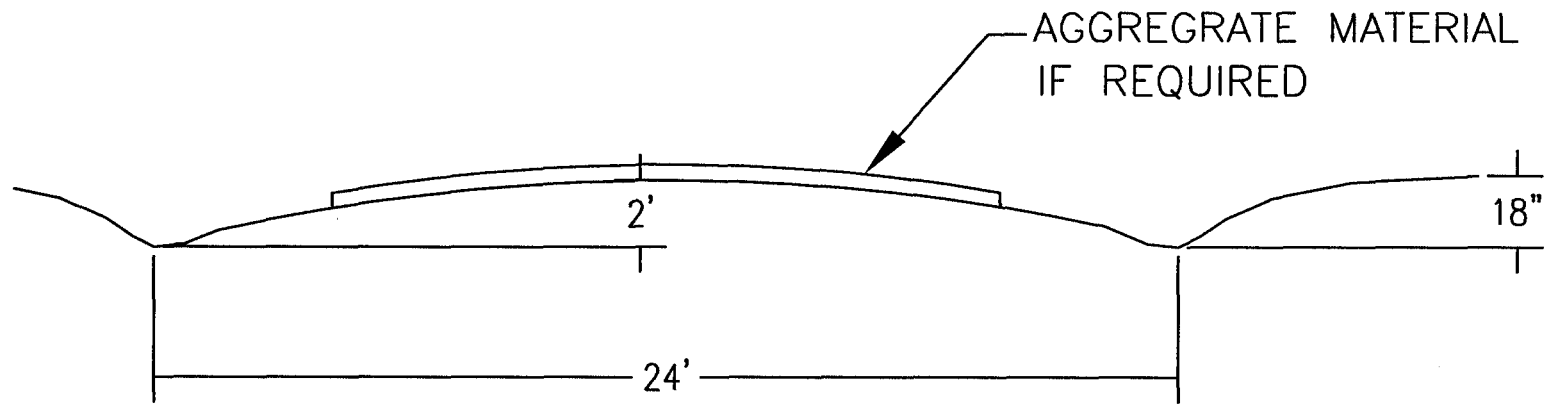
# BOP Equipment

3000psi WP



Summit Operating

# TYPICAL ROAD CROSS-SECTION



*Typical Road Cross Section*

*Summit Operating*

**WORKSHEET**  
**APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 06/08/2009

API NO. ASSIGNED: 43-019-31623

WELL NAME: WESTWATER ST 4-2-19-25

OPERATOR: SUMMIT OPERATING, LLC ( N2315 )

CONTACT: DAVID KNUDSEN

PHONE NUMBER: 435-940-9001

PROPOSED LOCATION:

NWNW 02 190S 250E

SURFACE: 0503 FNL 0502 FWL

BOTTOM: 0503 FNL 0502 FWL

COUNTY: GRAND

LATITUDE: 39.18943 LONGITUDE: -109.12410

UTM SURF EASTINGS: 662013 NORTHINGS: 4339266

FIELD NAME: GREATER CISCO ( 205 )

| INSPECT LOCATN BY: / / |          |         |
|------------------------|----------|---------|
| Tech Review            | Initials | Date    |
| Engineering            | DKD      | 7/16/09 |
| Geology                |          |         |
| Surface                |          |         |

LEASE TYPE: 3 - State

LEASE NUMBER: ML-49255

SURFACE OWNER: 3 - State

PROPOSED FORMATION: CHIN

COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

☒ Plat  
☒ Bond: Fed[] Ind[] Sta[] Fee[]  
(No. NZS633487 )  
☒ Potash (Y/N)  
☒ Oil Shale 190-5 (B) or 190-3 or 190-13  
☒ Water Permit  
(No. MUNICIPAL )  
☒ RDCC Review (Y/N)  
(Date: \_\_\_\_\_ )  
☒ Fee Surf Agreement (Y/N)  
☒ 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 14'14' lines  
400' fr OW & 1320' fr GW.

R649-3-11. Directional Drill

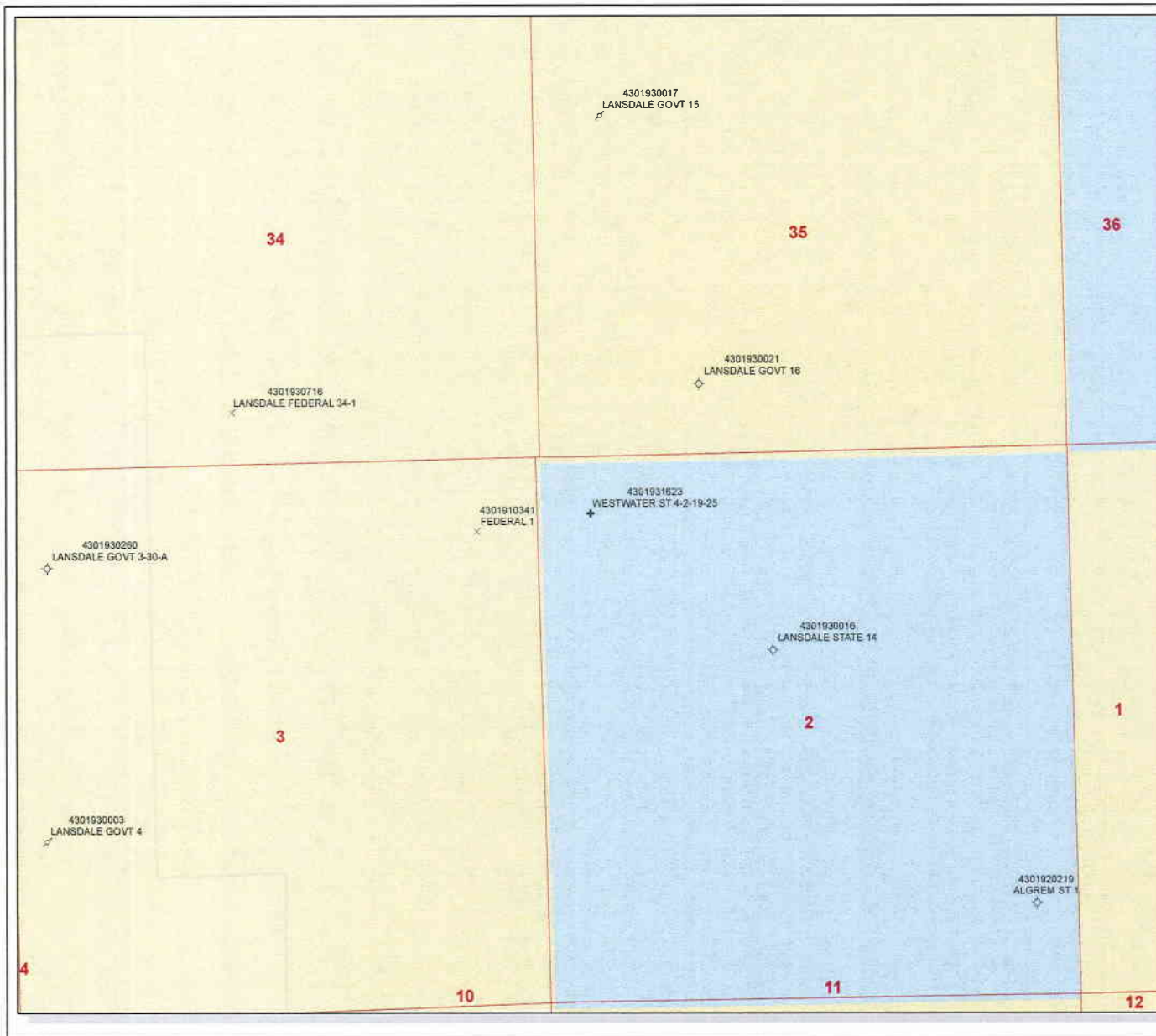
COMMENTS:

Needs Permit (06-16-09)

STIPULATIONS:

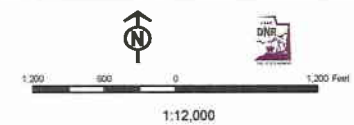
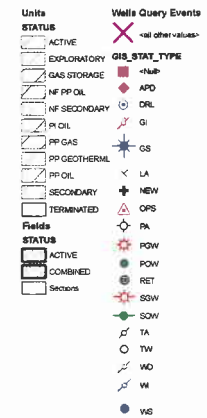
1- STATEMENT OF BASIS  
2- Cont st.p #4 (9 5/8" and 7")





**API Number: 4301931623**  
**Well Name: WESTWATER ST 4-2-19-25**  
**Township 19.0 S Range 25.0 E Section 02**  
**Meridian: SLBM**  
**Operator: SUMMIT OPERATING, LLC**

Map Prepared:  
 Map Produced by Diana Mason



# Application for Permit to Drill

## Statement of Basis

7/16/2009

Utah Division of Oil, Gas and Mining

Page 1

| APD No           | API WellNo                                                        | Status                   | Well Type | Surf Ownr | CBM |
|------------------|-------------------------------------------------------------------|--------------------------|-----------|-----------|-----|
| 1627             | 43-019-31623-00-00                                                |                          | WD        | S         | No  |
| <b>Operator</b>  | SUMMIT OPERATING, LLC                                             | <b>Surface Owner-APD</b> |           |           |     |
| <b>Well Name</b> | WESTWATER ST 4-2-19-25                                            | <b>Unit</b>              |           |           |     |
| <b>Field</b>     | UNDESIGNATED                                                      | <b>Type of Work</b>      |           |           |     |
| <b>Location</b>  | NWNW 2 19S 25E S 503 FNL 502 FWL GPS Coord (UTM) 662013E 4339266N |                          |           |           |     |

### 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 likely overlies 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  
APD Evaluator

7/8/2009  
Date / Time

### Surface Statement of Basis

Pre-site evaluation completed June 16, 2009. In attendance: Bart Kettle-DOGM, Ed Bonner-SITLA, David Knudson-Summit Energy, LLC, Red Rash-Summit Energy, LLC. Invited and choosing not to attend: Chris Wood-DWR, Mark Wright-Grand County.

As proposed the well pad contains a epermeral drainage running the full length of the well pad at roughly the center. Drainage shall be diverted to the north of the well pad at the intersection with the access road. Diverstion point, culvert outlet and discharge shall be rip rapped with 6" or greater stone to prevent eclerated errosinon.

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 or outside E&P waste. 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, and compliance with land use code.

Bart Kettle  
Onsite Evaluator

6/16/2009  
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  | The reserve pit shall be fenced upon completion of drilling operations.                                              |
| 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** SUMMIT OPERATING, LLC  
**Well Name** WESTWATER ST 4-2-19-25  
**API Number** 43-019-31623-0      **APD No** 1627      **Field/Unit** UNDESIGNATED  
**Location:** 1/4,1/4 NWNW      **Sec** 2      **Tw** 19S      **Rng** 25E      503 FNL 502 FWL  
**GPS Coord (UTM)**      **Surface Owner**

### **Participants**

Bart Kettle-DOGM, Ed Bonner-SITLA, David Knudson-Summit Energy, LLC, Red Rash-Summit Energy, LLC. Invited and choosing not to attend: Chris Wood-DWR, Mark Wright-Grand County.

### **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 Uncompagdere 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**

Grazing

Wildlife Habitat

#### **New Road**

| <b>Miles</b> | <b>Well Pad</b>  |                   | <b>Src Const Material</b> | <b>Surface Formation</b> |
|--------------|------------------|-------------------|---------------------------|--------------------------|
| 0.1          | <b>Width</b> 145 | <b>Length</b> 250 |                           | MDB                      |

#### **Ancillary Facilities**

### **Waste Management Plan Adequate?**

### **Environmental Parameters**

#### **Affected Floodplains and/or Wetland Y**

As proposed a wash cuts through the center of the well pad, diversion required.

#### **Flora / Fauna**

Grass: Curly gallata, cheat grass, bottle brush squirrel tail, Indian rice grass, Salina wild rye.

Forbs: Red steam filaree, halogeton, sunflower, apricot globe mallow, aster spp.

Shrubs: Wyoming sage, black grease wood, shadscale, spiny hop sage.

Trees: None

Other: prickly pear spp.

**Soil Type and Characteristics**

Mixture of Dakota sandstone outcrops and decomposed Mancos shale forming heavy gray clays mixed with gray sands.

**Erosion Issues Y**

Soils prone to wind erosion once disturbed. Access and well pad will require periodic watering to prevent them from forming large pockets of powder. Additional mitigation not recommended.

**Sedimentation Issues N****Site Stability Issues N****Drainage Diversion Required Y**

Drainage should be diverted to the north of the well pad at the culvert for the access road. Diversion point and discharge point shall be rip rapped with 6" or greater rock.

**Berm Required? N****Erosion Sedimentation Control Required? Y**

Periodic application of fresh water to access road and well pad.

**Paleo Survey Run? N    Paleo Potential 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  | Not Present      | 0                                   |
| <b>Final Score</b>                |                  | <b>20    1    Sensitivity Level</b> |

**Characteristics / Requirements**

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

**Other Observations / Comments**

Proposed project is being permitted with SITLA as a Surface special use lease. As proposed project would accept E&P fluids from surrounding states and would be assessed additional payments.

Grand County has not been contacted regarding use of County Road 193, or an encroachment for the access road. Zoning and Land Use codes have not been addressed with Grand County.

Arch and Paleo inventories have not been completed.

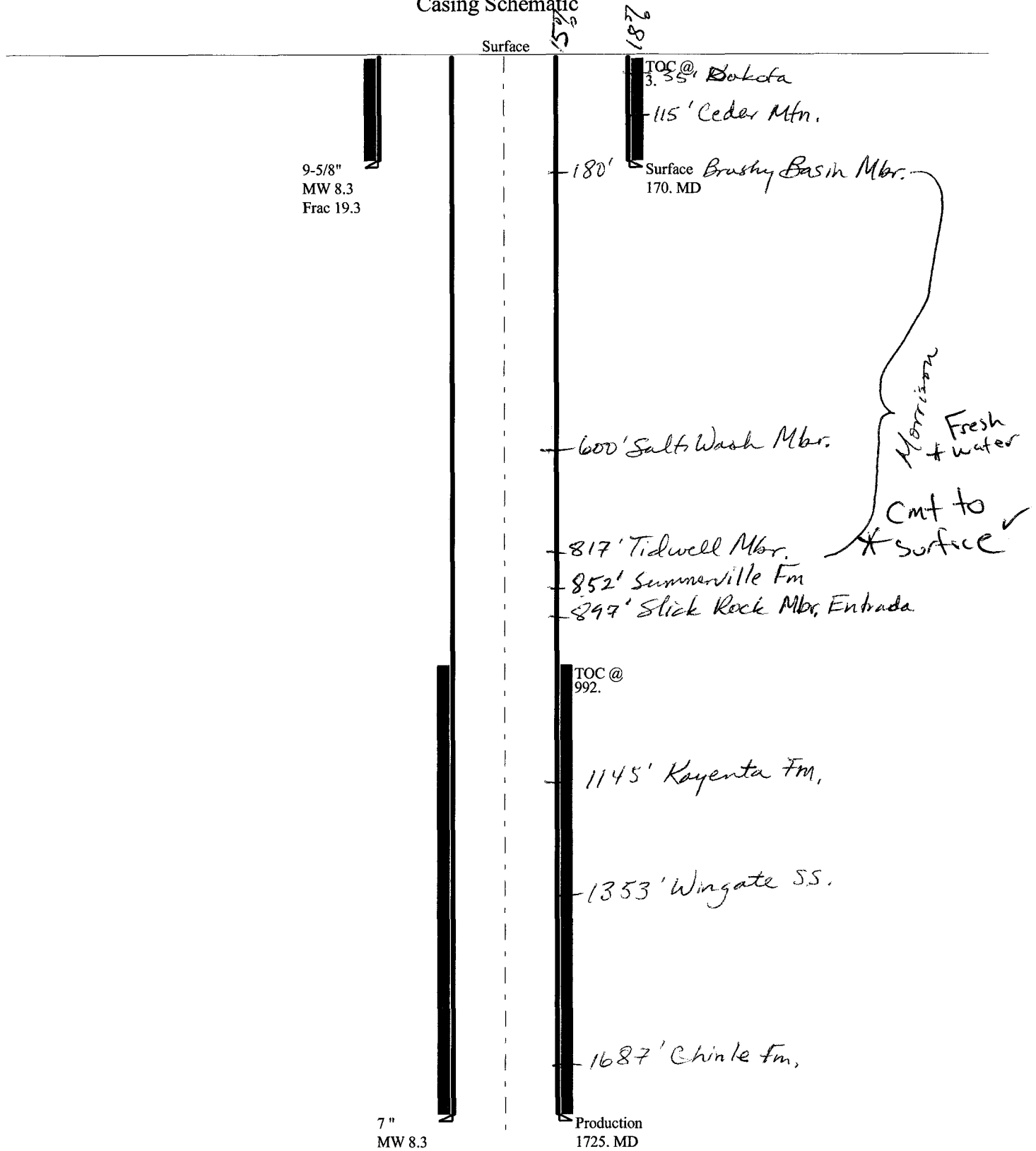


Bart Kettle  
Evaluator

6/16/2009  
Date / Time

43019316230000 Westwater ST 4-2-19-25

Casing Schematic



|              |                                              |                   |
|--------------|----------------------------------------------|-------------------|
| Well name:   | <b>43019316230000 Westwater ST 4-2-19-25</b> |                   |
| Operator:    | <b>Summit Operating, LLC</b>                 | Project ID:       |
| String type: | Surface                                      | 43-019-31623-0000 |
| Location:    | Grand County                                 |                   |

**Design parameters:**

**Collapse**

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

**Minimum design factors:**

**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 65 °F  
Bottom hole temperature: 67 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 120 ft

Cement top: 3 ft

**Burst**

Max anticipated surface pressure: 150 psi  
Internal gradient: 0.120 psi/ft  
Calculated BHP 170 psi

No backup mud specified.

**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: 149 ft

**Non-directional string.**

**Re subsequent strings:**

Next setting depth: 1,725 ft  
Next mud weight: 8.330 ppg  
Next setting BHP: 746 psi  
Fracture mud wt: 19.250 ppg  
Fracture depth: 170 ft  
Injection pressure: 170 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 (ft³) |
|---------|---------------------|-------------------------|-------------------------|------------------|----------------------|----------------------|---------------------|-------------------------|-------------------------|
| 1       | 170                 | 9.625                   | 32.30                   | H-40             | ST&C                 | 170                  | 170                 | 8.876                   | 75.1                    |
| 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       | 74                  | 1370                    | 18.623                  | 170              | 2270                 | 13.35                | 5                   | 254                     | 46.26 J                 |

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

Phone: 810-538-5357

Date: July 15, 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 170 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:   | <b>43019316230000 Westwater ST 4-2-19-25</b> |             |                   |
| Operator:    | <b>Summit Operating, LLC</b>                 |             |                   |
| String type: | Production                                   | Project ID: | 43-019-31623-0000 |
| Location:    | Grand County                                 |             |                   |

**Design parameters:**
**Collapse**

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

**Minimum design factors:**
**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 65 °F  
Bottom hole temperature: 89 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 368 ft

Cement top: 992 ft

**Burst**

Max anticipated surface pressure: 539 psi  
Internal gradient: 0.120 psi/ft  
Calculated BHP 746 psi

No backup mud specified.

**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: 1,509 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 (ft³) |
|---------|---------------------|-----------|-------------------------|-------|------------|----------------------|---------------------|---------------------|-------------------------|
| 1       | 1725                | 7         | 23.00                   | J-55  | LT&C       | 1725                 | 1725                | 6.25                | 381.3                   |

| 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       | 746                 | 3270                    | 4.381                  | 746              | 4360                 | 5.84                | 40                  | 313                     | 7.89 J                |

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

Phone: 810-538-5357

Date: July 15, 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 1725 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**
**Summit Westwater ST 4-2-19-25 API 43-019-31623-0000**
**INPUT**

Well Name

| Summit Westwater ST 4-2-19-25 API 43-019-31623-0000 |          |   |  |
|-----------------------------------------------------|----------|---|--|
| String 1                                            | String 2 |   |  |
| 8 5/8                                               | 7        |   |  |
| 500                                                 | 1725     |   |  |
| 0                                                   | 500      |   |  |
| 8.33                                                | 8.33     | ✓ |  |
| 500                                                 | 2000     |   |  |
| 2950                                                | 9240     |   |  |
| 700                                                 | 7.8 ppg  | ✓ |  |

Casing Size (")

Setting Depth (TVD)

Previous Shoe Setting Depth (TVD)

Max Mud Weight (ppg)

BOPE Proposed (psi)

Casing Internal Yield (psi)

Operators Max Anticipated Pressure (psi)

**Calculations**
**String 1 8 5/8 "**
**Max BHP [psi]**
 $.052 * \text{Setting Depth} * \text{MW} = 217$ 
**BOPE Adequate For Drilling And Setting Casing at Depth?**
**MASP (Gas) [psi]**
 $\text{Max BHP} - (0.12 * \text{Setting Depth}) = 157$ 

YES ✓

Air Drill

**MASP (Gas/Mud) [psi]**
 $\text{Max BHP} - (0.22 * \text{Setting Depth}) = 107$ 

YES

**\*Can Full Expected Pressure Be Held At Previous Shoe?**
**Pressure At Previous Shoe**  $\text{Max BHP} - .22 * (\text{Setting Depth} - \text{Previous Shoe Depth}) = 107$ 

NO 0.2

**Required Casing/BOPE Test Pressure**

500 psi

**\*Max Pressure Allowed @ Previous Casing Shoe =**

0 psi

\*Assumes 1psi/ft frac gradient

**Calculations**
**String 2 7 "**
**Max BHP [psi]**
 $.052 * \text{Setting Depth} * \text{MW} = 747$ 
**BOPE Adequate For Drilling And Setting Casing at Depth?**
**MASP (Gas) [psi]**
 $\text{Max BHP} - (0.12 * \text{Setting Depth}) = 540$ 

YES ✓

Air until mud required

**MASP (Gas/Mud) [psi]**
 $\text{Max BHP} - (0.22 * \text{Setting Depth}) = 368$ 

YES

**\*Can Full Expected Pressure Be Held At Previous Shoe?**
**Pressure At Previous Shoe**  $\text{Max BHP} - .22 * (\text{Setting Depth} - \text{Previous Shoe Depth}) = 478$ 

YES ✓

**Required Casing/BOPE Test Pressure**

1725 psi

**\*Max Pressure Allowed @ Previous Casing Shoe =**

500 psi

\*Assumes 1psi/ft frac gradient

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## Utah Division of Water Rights



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**Click on the back button to try again**

Please direct questions and comments regarding the map server to: [leeschler@utah.gov](mailto:leeschler@utah.gov).

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Utah Division of Water Rights | 1594 West North Temple Suite 220, P.O. Box 146300, Salt Lake City, Utah 84114-6300 | 801-538-7240  
[Natural Resources](#) | [Contact](#) | [Disclaimer](#) | [Privacy Policy](#) | [Accessibility Policy](#)

## Diana Mason - Fwd: Water injection well

---

**From:** Brad Hill  
**To:** Mason, Diana  
**Date:** 8/3/2009 1:16 PM  
**Subject:** Fwd: Water injection well

---

>>> Kurt Higgins 7/30/2009 5:07 PM >>>

Brad,  
Special Use Lease Application No. 1630

We have an application from Summit Operating, LLC for a Class 2 salt water disposal well located in Grand County described as T19S, R25E SLB&M Section 2. Proposed Westwater State #4-2-19-25.

Our archaeological staff has reviewed a survey report by GRI (U-09-GB-0358s) with a finding of no historic properties.

A paleontological survey was conducted June 6, 2009 Joshua Smith - BLM Colorado Permit C-60700. No vertebrate fossils were discovered during the survey. Abundant invertebrate fossils littered the surface. These invertebrate fossils were mostly disarticulated fragments from the underlying Dakota Formation. No paleontological restrictions should be placed on development of the site. Should vertebrate fossils be discovered during construction a qualified paleontologist should be contacted to evaluate the discovery.  
(this provision will be included in our lease when executed)  
Kurt

Kurt M. Higgins  
Trust Lands Resource Specialist  
School and Institutional  
Trust Lands Administration  
675 East 500 South, Suite 500  
Salt Lake City, Utah 84102-2818

Phone: (801) 538-5100  
Fax: (801) 355-0922  
Email: khiggins@utah.gov



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

August 3, 2009

Summit Operating, LLC  
1441 Ute Blvd, Ste. 280  
Park City, UT 84098

Re: Westwater State 4-2-19-25 Well, 503' FNL, 502' FWL, NW NW, Sec. 2, 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 43-019-31623.

Sincerely,

Gil Hunt  
Associate Director

pab  
Enclosures

cc: Grand County Assessor  
SITLA



Operator: Summit Operating, LLC  
Well Name & Number Westwater State 4-2-19-25  
API Number: 43-019-31623  
Lease: ML-49255

Location: NW NW Sec. 2 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. Notification Requirements

The operator is required to notify the Division of Oil, Gas and Mining of the following action during drilling of this well:

- 24 hours prior to cementing or testing casing – contact Dan Jarvis
- 24 hours prior to testing blowout prevention equipment – contact Dan Jarvis
- 24 hours prior to spudding the well – contact Carol Daniels
- Within 24 hours of any emergency changes made to the approved drilling program – contact Dustin Doucet
- Prior to commencing operations to plug and abandon the well – contact Dan Jarvis

The operator is required to get approval from the Division of Oil, Gas and Mining before performing any of the following actions during the drilling of this well:

- Plugging and abandonment or significant plug back of this well – contact Dustin Doucet
- Any changes to the approved drilling plan – contact Dustin Doucet

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voice mail message if the person is not available to take the call):

- Dan Jarvis at: (801) 538-5338 office (801) 942-0871 home
- Carol Daniels at: (801) 538-5284 office
- Dustin Doucet at: (801) 538-5281 office (801) 733-0983 home

#### 3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.



Page 2  
43-019-31623  
August 3, 2009

4. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.
5. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)
6. Cement volumes for the 9 5/8" and 7" casing strings shall be determined from actual hole diameters in order to place cement from the pipe setting depths back to the surface.

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:

Sitla 5319

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:

8. WELL NAME and NUMBER:

Westwater State 4-2-19-25

9. API NUMBER:

4301931623

10. FIELD AND POOL, OR WILDCAT:

1. TYPE OF WELL

OIL WELL ☐

GAS WELL ☐

OTHER Disposal well

2. NAME OF OPERATOR:

Summit Operating LLC

3. ADDRESS OF OPERATOR:

1441 Ute Blvd Suite 280

CITY Park City

STATE Ut

ZIP 84098

PHONE NUMBER:

(432) 940-9001

4. LOCATION OF WELL

FOOTAGES AT SURFACE:

COUNTY: Grand

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWNW 2 19S 25E

STATE:

UTAH

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

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

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

Summit hereby proposes to change the design of the well head to eliminate the BOP and use a flow diverter as described in the attached schematic.

COPY SENT TO OPERATOR

Date: 9.9.2009

Initials: KS

NAME (PLEASE PRINT)

David Knudson

TITLE

Operations

SIGNATURE

[Signature]

DATE

Sept 3-09

(This space for State use only)

APPROVED BY THE STATE  
OF UTAH DIVISION OF  
OIL, GAS, AND MINING

DATE 9/3/09

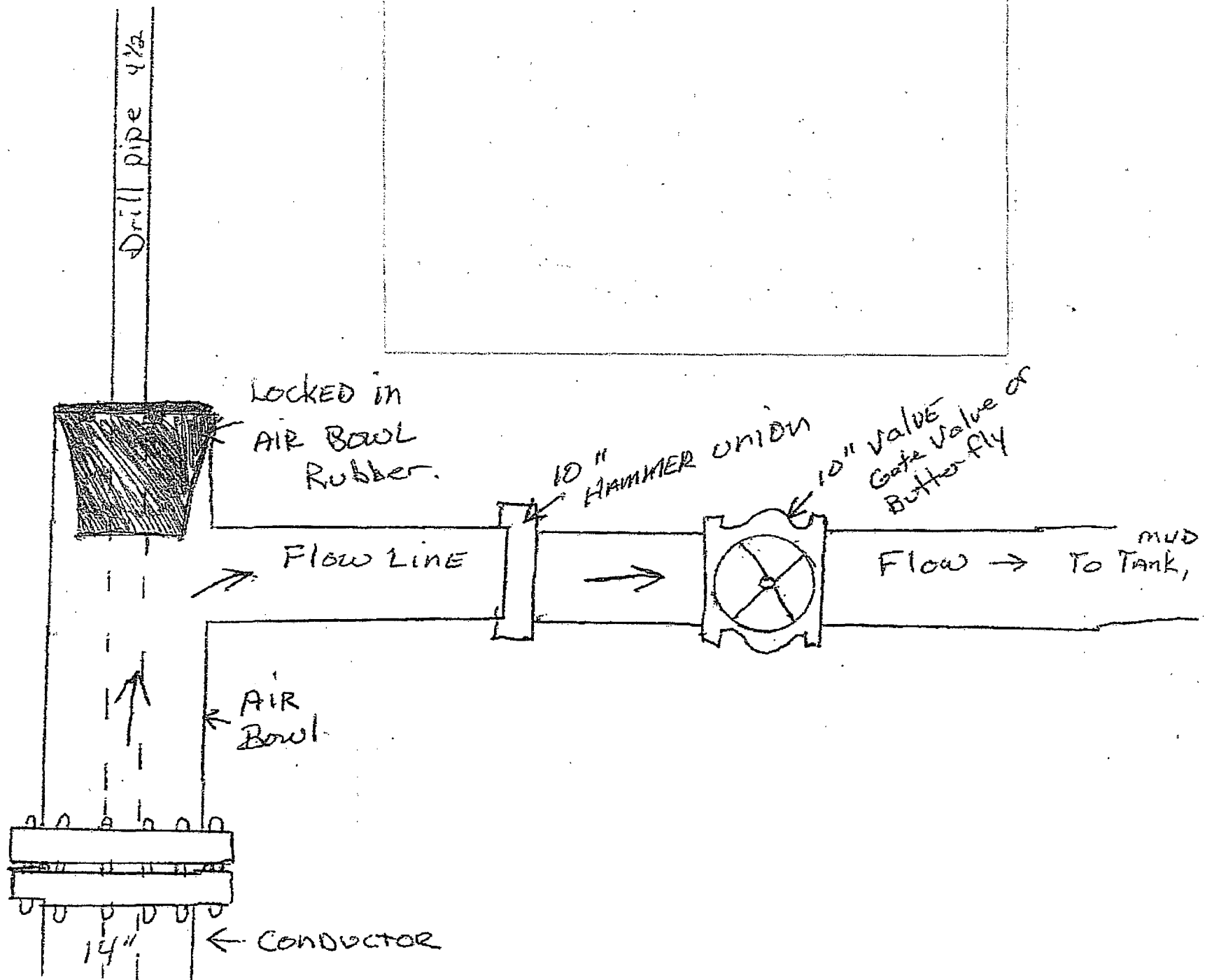
BY: [Signature]

(See Instructions on Reverse Side)

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SEP 03 2009

DIV. OF OIL, GAS & MINING



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.

|                                                                                                                   |  |                                                              |
|-------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------|
| 1. TYPE OF WELL<br>OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <u>Disposal Well</u> |  | 5. LEASE DESIGNATION AND SERIAL NUMBER:<br><b>SITLA 5319</b> |
| 2. NAME OF OPERATOR:<br><b>Summit Operating</b>                                                                   |  | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME:                        |
| 3. ADDRESS OF OPERATOR:<br>1441 Ute Blvd Suite 280 CITY <u>Park City</u> STATE <u>Ut</u> ZIP <u>84098</u>         |  | 7. UNIT or CA AGREEMENT NAME:                                |
| PHONE NUMBER:<br><b>(435) 940-9001</b>                                                                            |  | 8. WELL NAME and NUMBER:<br><b>Westwater State 4-2-19-25</b> |
| 4. LOCATION OF WELL<br>FOOTAGES AT SURFACE:                                                                       |  | 9. API NUMBER:<br><b>4301931623</b>                          |
| QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>NWNW 2 19S 25E</b>                                                |  | 10. FIELD AND POOL, OR WILDCAT:                              |

COUNTY: **Grand County**

STATE: **UTAH**

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

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

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

Summit requests the following change on the proposed casing and cementing program:

| Size of hole | casing size, grade, weight | set depth | Cement Type, quantity, yield, and slurry weight                                                                                         |
|--------------|----------------------------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------|
| 20"          | 14" A53 Grade B 36.75#     | 120       | Class G 2% Calcium Chloride, 1/4lb per sack flow sill<br>244 sacks 1.15 cu ft/sk 15.8 ppg                                               |
| 12 1/4"      | 8 5/8" J55 24#             | 1,725     | Hi fill 186 sacks, 3.82 cu ft/sk 11 ppg and<br>Class G 2% Calcium Chloride, 1/4lb per sac flow sill<br>366 sacks 1.15 cu ft/sk 15.8 ppg |

**COPY SENT TO OPERATOR**

Date: 9.3.2009  
Initials: KS

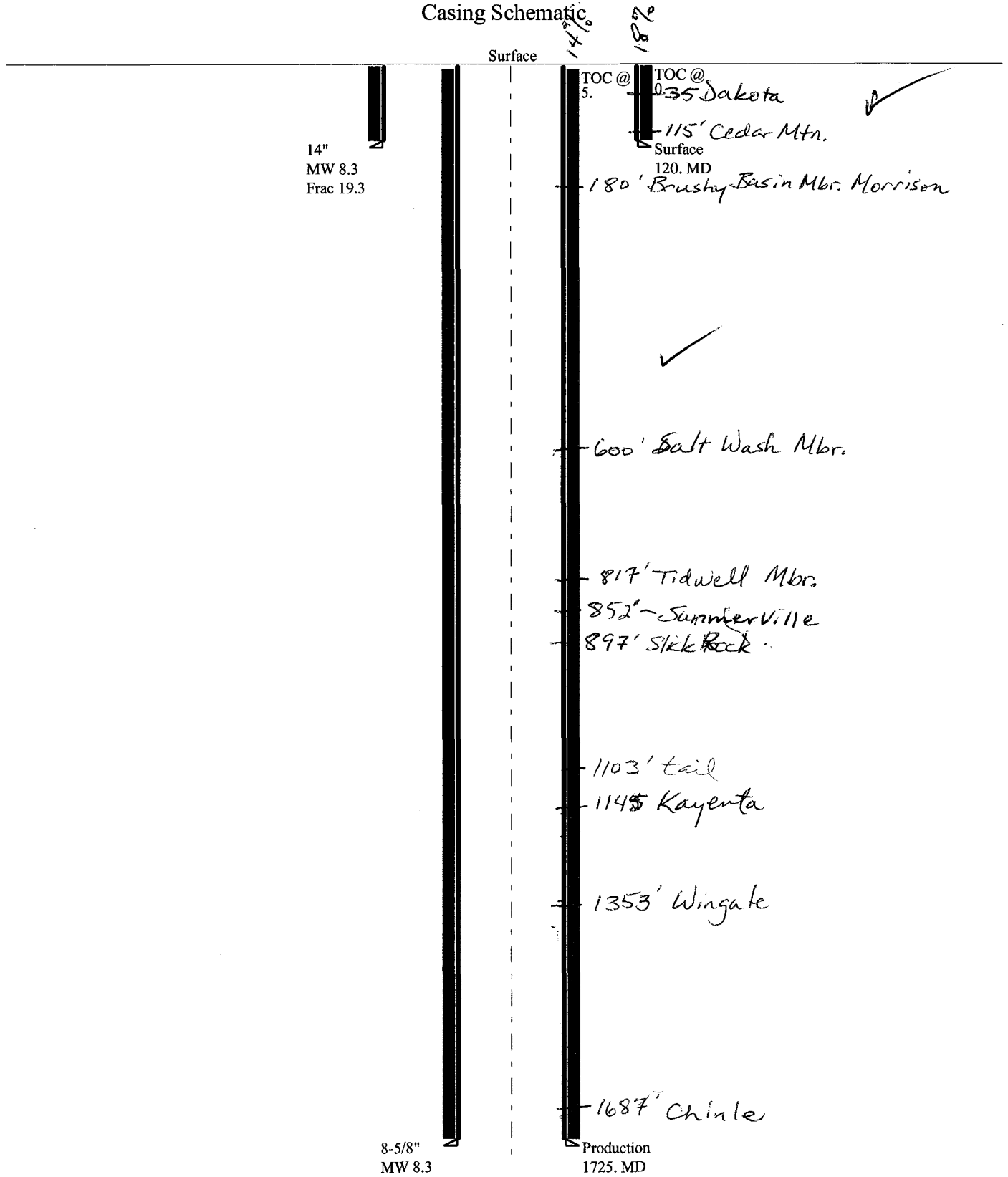
|                                          |                         |
|------------------------------------------|-------------------------|
| NAME (PLEASE PRINT) <u>David Knudsen</u> | TITLE <u>Operations</u> |
| SIGNATURE <u>[Signature]</u>             | DATE <u>11-2-09</u>     |

(This space for State use only)

**APPROVED BY THE STATE  
OF UTAH DIVISION OF  
OIL, GAS, AND MINING**  
DATE: 9/3/09  
BY: [Signature] (See Instructions on Reverse Side)

43019316230000 Westwater ST 4-2-19-25

Casing Schematic





|              |                                              |             |                   |
|--------------|----------------------------------------------|-------------|-------------------|
| Well name:   | <b>43019316230000 Westwater ST 4-2-19-25</b> |             |                   |
| Operator:    | <b>Summit Operating, LLC</b>                 |             |                   |
| String type: | Production                                   | Project ID: | 43-019-31623-0000 |
| Location:    | Grand County                                 |             |                   |

**Design parameters:**
**Collapse**

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

**Minimum design factors:**
**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 65 °F  
Bottom hole temperature: 89 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 368 ft

Cement top: 5 ft

**Burst**

Max anticipated surface pressure: 539 psi  
Internal gradient: 0.120 psi/ft  
Calculated BHP 746 psi

No backup mud specified.

**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: 1,509 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 (ft³) |
|---------|---------------------|-------------------------|-------------------------|------------------|----------------------|----------------------|---------------------|-------------------------|-------------------------|
| 1       | 1725                | 8.625                   | 24.00                   | J-55             | ST&C                 | 1725                 | 1725                | 7.972                   | 616.8                   |
| 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       | 746                 | 1370                    | 1.835                   | 746              | 2950                 | 3.95                 | 41                  | 244                     | 5.89 J                  |

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

Phone: 810-538-5357

Date: September 3, 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 1725 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.*

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.

|                                                                                                                         |  |                                                              |
|-------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------|
| 1. TYPE OF WELL<br>OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <u>Injection</u>           |  | 5. LEASE DESIGNATION AND SERIAL NUMBER:<br><u>ML-49255</u>   |
| 2. NAME OF OPERATOR:<br><u>Summit Operating, LLC</u>                                                                    |  | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME:<br><u>N/A</u>          |
| 3. ADDRESS OF OPERATOR:<br><u>1245 Brickyard Road # 210</u> CITY <u>Salt Lake City</u> STATE <u>Ut</u> ZIP <u>84106</u> |  | 7. UNIT or CA AGREEMENT NAME:<br><u>N/A</u>                  |
| PHONE NUMBER:<br><u>(435) 940-9001</u>                                                                                  |  | 8. WELL NAME and NUMBER:<br><u>Westwater State 4-2-19-25</u> |
| 4. LOCATION OF WELL<br>FOOTAGES AT SURFACE: <u>503' FNL, 502' FWL</u>                                                   |  | 9. API NUMBER:<br><u>4301931623</u>                          |
| QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <u>NWNW 2 19S 25E S</u>                                                    |  | 10. FIELD AND POOL, OR WILDCAT:<br><u>Greater Cisco</u>      |
| STATE: <u>UTAH</u>                                                                                                      |  |                                                              |

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

| TYPE OF SUBMISSION                                                                                                          | TYPE OF ACTION                                          |                                                           |                                                                    |
|-----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|-----------------------------------------------------------|--------------------------------------------------------------------|
| <input checked="" type="checkbox"/> NOTICE OF INTENT<br>(Submit in Duplicate)<br>Approximate date work will start:<br>_____ | <input type="checkbox"/> ACIDIZE                        | <input type="checkbox"/> DEEPEN                           | <input type="checkbox"/> REPERFORATE CURRENT FORMATION             |
|                                                                                                                             | <input type="checkbox"/> ALTER CASING                   | <input type="checkbox"/> FRACTURE TREAT                   | <input type="checkbox"/> SIDETRACK TO REPAIR WELL                  |
|                                                                                                                             | <input type="checkbox"/> CASING REPAIR                  | <input type="checkbox"/> NEW CONSTRUCTION                 | <input type="checkbox"/> TEMPORARILY ABANDON                       |
|                                                                                                                             | <input type="checkbox"/> CHANGE TO PREVIOUS PLANS       | <input type="checkbox"/> OPERATOR CHANGE                  | <input type="checkbox"/> TUBING REPAIR                             |
|                                                                                                                             | <input type="checkbox"/> CHANGE TUBING                  | <input type="checkbox"/> PLUG AND ABANDON                 | <input type="checkbox"/> VENT OR FLARE                             |
| <input type="checkbox"/> SUBSEQUENT REPORT<br>(Submit Original Form Only)<br>Date of work completion:<br>_____              | <input type="checkbox"/> CHANGE WELL NAME               | <input type="checkbox"/> PLUG BACK                        | <input type="checkbox"/> WATER DISPOSAL                            |
|                                                                                                                             | <input type="checkbox"/> CHANGE WELL STATUS             | <input type="checkbox"/> PRODUCTION (START/RESUME)        | <input type="checkbox"/> WATER SHUT-OFF                            |
|                                                                                                                             | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS | <input type="checkbox"/> RECLAMATION OF WELL SITE         | <input checked="" type="checkbox"/> OTHER: <u>Extension of APD</u> |
|                                                                                                                             | <input type="checkbox"/> CONVERT WELL TYPE              | <input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION |                                                                    |

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

Summit hereby requests an extension of the above described APD.

COPY SENT TO OPERATOR

Date: 10-11-2010

Initials: KS

Approved by the  
Utah Division of  
Oil, Gas and Mining

Date: 10-06-10  
By: [Signature]

|                                                                    |                       |
|--------------------------------------------------------------------|-----------------------|
| NAME (PLEASE PRINT) <u>David Knudson for Summit Operating, LLC</u> | TITLE <u>Land</u>     |
| SIGNATURE <u>[Signature]</u>                                       | DATE <u>10/4/2010</u> |

(This space for State use only)

RECEIVED

OCT 04 2010

DIV. OF OIL, GAS & MINING



**Application for Permit to Drill  
Request for Permit Extension  
Validation**

(this form should accompany the Sundry Notice requesting permit extension)

**API:** 43-019-31623  
**Well Name:** Westwater State 4-2-19-25  
**Location:** NWNW sec 2, T19S, R25E  
**Company Permit Issued to:** Summit Operating, LLC  
**Date Original Permit Issued:** 8/3/2009

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.

If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes ☐ No ☒

Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes ☐ No ☒

Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes ☐ No ☒

Have there been any changes to the access route including ownership, or right-of-way, which could affect the proposed location? Yes ☐ No ☒

Has the approved source of water for drilling changed? Yes ☐ No ☒

Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes ☐ No ☒

Is bonding still in place, which covers this proposed well? Yes ☒ No ☐

  
Signature

Oct 6, 2010  
Date

Title: Operations

Representing: Summit Operating, LLC