MILLER DYER & CO. LLC

475 Seventeenth Street, Suite 1200
Denver, Colorado 80202
P: 303-292-0949
F: 303-292-3901

October 26, 2007

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

RE: Applications for Permit to Drill
Ute Tribal #1-29-14-20 NENE Section 29 T14S-R20E
Ute Tribal #15-29-14-20 SWSE Section 29 T14S-R20E
Ute Tribal #3-30-14-20 NENW Section 30 T14S-R20E
Ute Tribal #11-30-14-20 NESW Section 30 T14S-R20E
Ute Tribal #12-28-14-20 NWSW Section 28 T14S-R20E
Ute Tribal #3-32-14-20 NENW Section 32 T14S-R20E
Uintah County, Utah

Dear Ms. Mason:

Enclosed please find a copy of the APD's for the Ute Tribal #3-30-14-20 and Ute Tribal #11-30-14-20. These wells will be drilled on Lease #U-019837 located on Ute Tribal Lands. Also please find a copy of the APD's for the Ute Tribal #1-29-14-20, Ute Tribal #15-29-14-20 and the Ute Tribal #12-28-14-20. These wells will be drilled on Lease #U-10166 located on Ute Tribal Lands. Additionally find a copy of the Ute Tribal #3-32-14-20 to be drilled on the State of Utah lease ML-44317 located on Ute Tribal Lands. Water for the drilling will come from Miller, Dyer & Co. existing water source well the Ute Tribal #30-4 located in NENW of Section 30-T14S-R20E.

Please do not hesitate to call me at (303) 292-0949 ext 102 if you have any questions or need additional information.

Sincerely,

Jeffrey H. Lang
Vice President of Operations

CC: BLM - 3

RECEIVED
OCT
DIV. OF OIL, GAS & MINING

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: ML-44317	6. SURFACE: Indian
1A. TYPE OF WORK: DRILL ☑ REENTER ☐ DEEPEN ☐	7. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute Indian Tribe
B. TYPE OF WELL: OIL ☐ GAS ☑ OTHER _____ SINGLE ZONE ☐ MULTIPLE ZONE ☑	8. UNIT or CA AGREEMENT NAME: N/A
2. NAME OF OPERATOR: Miller, Dyer & Co., LLC	9. WELL NAME and NUMBER: Ute Tribal 3-32-14-20
3. ADDRESS OF OPERATOR: 475 17th St Suite 1200 CITY Denver STATE CO ZIP 80202 / PHONE NUMBER: (303) 292-0949	10. FIELD AND POOL, OR WILDCAT: Flat Rock
4. LOCATION OF WELL (FOOTAGES) AT SURFACE: 809 FNL 1529 FWL 611226X 39.560844 AT PROPOSED PRODUCING ZONE: SAME 43796084 -109.705289	11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NENW 32 14S 20E S
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: See Topo Map "A" (Attached)	12. COUNTY: Uintah / 13. STATE: UTAH

15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET)	16. NUMBER OF ACRES IN LEASE:	17. NUMBER OF ACRES ASSIGNED TO THIS WELL:
809	640	40
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET)	**19. PROPOSED DEPTH:**	**20. BOND DESCRIPTION:**
525	12,500	RLB0008085
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.):	**22. APPROXIMATE DATE WORK WILL START:**	**23. ESTIMATED DURATION:**
7499 GR	5/1/2008	40 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
26"	20" Conductor .250" Wall	40	Ready Mix to Surface
12-1/4"	9-5/8" J-55 36#	3,300	Class G & Prem Lite 727 sacks 1.17 & 3.38 11 & 15.8
8-3/4"	5-1/2" N80/P110 17#	12,500	Class G & Prem Lite 1254 sacks 1.65 & 3.15 14.4-11.2-1

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
- ☑ EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER
- ☑ COMPLETE DRILLING PLAN
- ☐ FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER

NAME (PLEASE PRINT) Jeffrey H. Lang TITLE Vice President of Operations

SIGNATURE _____ DATE 10/23/07

(This space for State use only)

API NUMBER ASSIGNED: 43-047-37741

Approved by the
Utah Division of
Oil, Gas and Mining

APPROVAL:

Date: 11-21-07

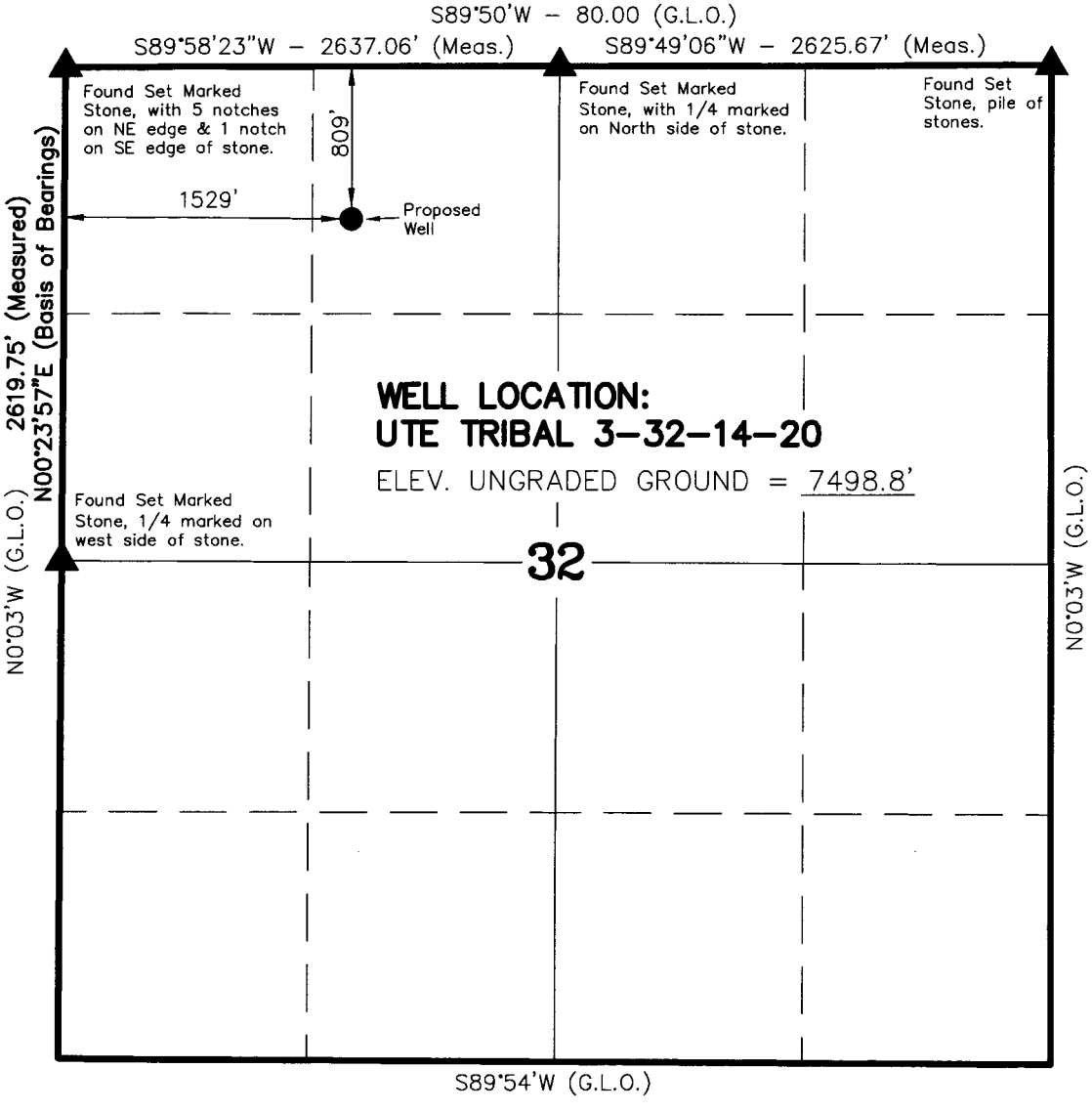
By: _____

(See Instructions on Reverse Side)

RECEIVED
OCT 29 2007
DIV. OF OIL, GAS & MINING

(11/2001)

T14S, R20E, S.L.B.&M.

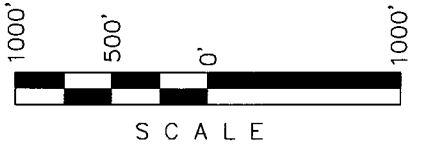


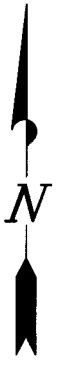
▲ = SECTION CORNERS LOCATED
BASIS OF ELEVATION IS BENCH MARK 60 WF 1952 LOCATED IN THE SW 1/4 OF SECTION 35, T14S, R20E, S.L.B.&M. THE ELEVATION OF THIS BENCH MARK IS SHOWN ON THE FLAT ROCK MESA 7.5 MIN. QUADRANGLE AS BEING 7363'.

UTE TRIBAL 3-32-14-20
(Proposed Well Head)
NAD 83 Autonomous
LATITUDE = 39° 33' 39.02"
LONGITUDE = 109° 42' 21.53"

MILLER, DYER & CO. LLC

WELL LOCATION, UTE TRIBAL 3-32-14-20, LOCATED AS SHOWN IN THE NE 1/4 NW 1/4 OF SECTION 32, T14S, R20E, S.L.B.&M. UINTAH COUNTY, UTAH.





NOTES:
1. Well footages are measured at right angles to the Section Lines.
2. G.L.O. distances are shown in feet or chains. 1 chain = 66 feet.
3. Bearings are based on Global Positioning Satellite observations.

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR No.362251 KOLBY R. KAY STATE OF UTAH

REGISTERED LAND SURVEYOR
REGISTRATION NO. 362251
STATE OF UTAH

TIMBERLINE (435) 789-1365
ENGINEERING & LAND SURVEYING, INC.
38 WEST 100 NORTH – VERNAL, UTAH 84078

DATE SURVEYED: 09-07-07	SURVEYED BY: B.J.S.	SHEET 2 OF 10
DATE DRAWN: 09-25-07	DRAWN BY: M.W.W.	
SCALE: 1" = 1000'	Date Last Revised:	

DRILLING PLAN
MILLER, DYER & CO. LLC

Ute Tribal #3-32-14-20
NENW Section 32 T14S-R20E

1. Estimated Formation Tops

Estimated Formation Tops:	Measured Depth
Green River	Surface
Wasatch	2,214'
Base High Resistivity	3,219'
Mesaverde	4,367'
Castlegate Sandstone	6,205'
Mancos Shale	6,489'
Dakota Sandstone	10,597'
Cedar Mountain	10,752'
Morrison	10,978'
Curtis	11,505'
Entrada Sandstone	11,584'
Carmel	11,914'
Wingate	12,063'
TD	12,500'

2. Estimated Depth and Thickness of Zones

Tops	MD	Thickness	Anticipated Formation Contents
Wasatch	2,214	1000	Oil and/or gas anticipated > 3,000'
Mesaverde	4,367	500	Gas
Castlegate Sandstone	6,205	300	Gas
Dakota Sandstone	10,597	150	Gas
Cedar Mountain	10,752	200	Gas
Morrison	10,987	300	Gas
Entrada Sandstone	11,584	300	Gas
Wingate	12,063	500	Gas

3. Pressure Control Equipment

Schematic attached (Attachment "A")

Blow Out Preventer (BOP) will be equipped as follows:

A. Type: Eleven (11) inch double gate hydraulic 3,000 psi BOP plus a 3000 psi annular preventer mounted on a 3,000 psi casinghead.
    a. One set of blind rams (above)
    b. One set of pipe rams (below)
    c. Appropriate fill, kill and choke lines will be 3,000 psi working pressure

Note: The calculation of maximum anticipated surface pressure is detailed in Section 7. This calculation is based on the maximum anticipated bottom-hole pressure and a partially evacuated hole. According to this calculation, a 3000 psi BOP and annular preventer will be sufficient to drill this well safely. However, depending on the actual rig contracted for this well, a 5000 psi system may come with the rig. If so, all testing will be done to 5000 psi specifications.

B. Auxiliary Equipment:
Auxiliary equipment to include upper Kelly cock with a handle, a floor safety valve with subs to fit all drill string connections in use, and a string float valve.

C. Pressure Rating: 3,000 psi WP

D. Testing Procedure:

Hydraulic Ram-Type BOP

At a minimum, the BOP, choke manifold, and related equipment will be pressure tested to the approved working pressure of the BOP stack of 3,000 psi. This pressure will be maintained for a period of at least ten (10) minutes or until the requirements of the test are met, whichever is longer.

At a minimum, the above pressure test will be performed:

1) when the BOP is initially installed,
2) whenever any seal subject to test pressure is broken,
3) following related repairs, and
4) at thirty (30) day intervals.

In addition to the above, the pipe and blind rams will be activated each trip, but no more than once each day.

E. Choke Manifold Equipment:
All choke lines will be straight lines; turns will use tee blocks, or targeted running tees, and will be anchored to prevent whip and vibration. The manifold will have two (2) manual chokes and a pressure gauge.

F. Accumulator:

The accumulator will have sufficient capacity to open the hydraulically controlled choke line valve, if so equipped, close all rams plus the annular BOP, and retain a minimum of 200 psi above precharge on the closing manifold without the use of the closing unit pumps. The fluid reservoir capacity will be double the usable fluid volume of the accumulator system capacity, and the fluid level of the reservoir will be maintained to the manufacturer's recommendations.

G. Miscellaneous Information:
The choke manifold and BOP ram extensions rods with hand wheels will be located outside the rig substructure. The hydraulic BOP closing unit will be located at least 25 feet from the well head, but readily accessible to the driller. Exact location and configuration of the hydraulic BOP closing unit will depend on the layout of the particular rig contracted to drill this well.

A flare line will be installed from the choke manifold to a flare pit, extending a minimum of 100 feet from the center of the drill hole.

The BOP and related pressure control equipment will be installed, tested and maintained in compliance with the specifications and requirements of the Onshore Oil and Gas Order Number 2.

Auxiliary Equipment

a. Kelly cock – Yes
b. Float sub at bit – No
c. Mud logger & instrumentation – Yes
d. Full-opening safety valve on rig floor – Yes
e. Rotating head – No

4. Casing Program

	Setting Depth	Hole Size	Casing O.D.	Grade	Weight/Ft.	Thread
Conductor	40'	26"	20"	Conductor	0.250" wall	
Surface	3,300'	12-1/4"	9-5/8"	J-55	36#	STC
Production	0'-1,200'	8-3/4"	5-1/2"	N-80	17#	Buttress
	1,200'-11,000'	8-3/4"	5-1/2"	N-80	17#	LTC
	11,000'-12,500'	8-3/4"	5-1/2"	P-110	17#	LTC

- Subject to review on the basis of actual conditions encountered. Production casing depth will be adjusted based on results.

- Depending on availability, 17#, P-110, LT&C may be substituted for the 17#, N-80, Buttress casing at the top of the production string.
- Casing design runs are shown for each casing string. See Attachment "B"

5. Cement Program

Conductor Casing: 0'-40'

Ready Mix to surface

Surface Casing: 0' – 3300'

Lead Cement:
0'-2800'
11.0 ppg Premium Lite II cement
10% bwoc Bentonite
0.5% bwoc Sodium Metasilicate
5 #/sk Kol Seal
0.25 #/sk Cello Flake
3% bwow Potassium Chloride
Cement yield = 3.38 ft3/sk w/ 20.5 gal/sk water
Annular volume (in open hole) = 2760' * 0.3132 ft3/ft = 864.4 ft3
Excess = 50%
Total volume (open hole) w/ excess = 864.4 ft3 * 1.50 = 1296.6 ft3
Annular volume (in conductor) = 40' * 1.5687 ft3/ft = 62.7 ft3
Excess = 0%
Total volume (open hole & conductor) = 1359 ft3

Lead Cement Requirement = 1359 ft3 / 3.38 ft3/sk = **403 sks**

Tail Cement:
2800'-3300' plus shoe joint
15.8 ppg Class G
2% bwoc Calcium Chloride
0.25 #/sk Cello Flake
Cement yield = 1.17 ft3/sk w/ 5 gal/sk water
Annular volume (in open hole) = 500' * 0.3132 ft3/ft = 156.6 ft3
Excess = 50%
Total volume (open hole) w/ excess = 156.6 ft3 * 1.50 = 234.9 ft3
Shoe volume = 40' * 0.4341 ft3/ft = 17.4 ft3
Excess (shoe) = 0%
Total volume (open hole & shoe) = 234.9 + 17.4 = 252 ft3

Tail Cement Requirement = 252 ft3 / 1.17 ft3/sk = **217 sks**

Displacement Volume:

3260' * 0.0773 bbl/ft = 252 bbls

Top Out Cement:

0-200' (displaced down backside w/ 1" string)
15.8 ppg Class G
2% bwoc Calcium Chloride
0.25 #/sk Cello Flake
Cement yield = 1.17 ft3/sk w/ 5 gal/sk water
Annular volume = 200' * 0.3132 ft3/ft = 62.6 ft3
Excess = 100%
Total volume w/ excess = 62.6 ft3 * 2.0 = 125.2 ft3
Top Out Cement Requirement = 125.2 ft3 / 1.17 ft3/sk = **107 sks**

Production Casing: 0'-12,500' (DV Tool @ 10,000')

Stage 1

Cement:

10,000'-12,500'
14.4 ppg 50:50 Poz (Fly Ash): Class G Cement (or equivalent)
0.05 #/sk Static Free
0.2% bwoc R-3
3% bwow Potassium Chloride
0.25 #/sk Cello Flake
0.9% bwoc FL-25
1 gal / 100 sk FP-6L
35% bwoc Silica Flour
0.2% bwoc BA-59
0.2% bwoc Bentonite
Cement yield = 1.65 ft3/sk w/ 7.12 gal/sk water
Annular volume = 2500' * 0.2526 ft3/ft = 631.5 ft3
Excess = 25%
Total volume w/ excess = 631.5 ft3 * 1.25 = 789.4 ft3
Shoe volume = 40' * 0.1305 ft3/ft = 5.2 ft3
Excess (shoe) = 0%
Total volume w/ excess (incl. shoe) = 789.4 + 5.2 = 794 ft3
Stage 1 Cement Requirement = 794 ft3 / 1.65 ft3/sk = **480 sks**

Displacement Volume:

(12,500'-40') * 0.0232 bbl/ft = 289.0 bbls

Stage 2 (DV tool to 500' inside surface casing)

Lead Cement:

2,800'-9,593'
11.2 ppg Premium Lite II cement (or equivalent)
3 #/sk CSE

0.3% bwoc R-3
3% bwow Potassium Chloride
10% bwoc Bentonite
0.2% bwoc Sodium Metasilicate
Cement yield = 3.15 ft3/sk w/ 19 gal/sk water
Volume inside surface casing = 500' * 0.2691 ft3/ft = 134.5 ft3
Excess = 0%
Annular volume = 6293' * 0.2526 ft3/ft = 1589.6 ft3
Excess = 25%
Annular volume w/ excess = 1589.6 ft3 * 1.25 = 1987.0 ft3
Total volume = 134.5 + 1987.0 = 2121.5 ft3
Lead Cement Requirement = 2121.5 ft3 / 3.15 ft3/sk = **674 sks**

Tail Cement:

9,593' – 10,000'
14.2 ppg 50:50 Poz (Fly Ash): Class G Cement (or equivalent)
0.05% bwoc Static Free
0.1% bwoc R-3
3% bwow Potassium Chloride
0.9% bwoc FL-25
1 gal / 100 sk FP-6L
2% bwoc Bentonite
0.2% bwoc Sodium Metasilicate
0.2% bwoc BA-59
Cement yield = 1.29 ft3/sk w/ 5.8 gal/sk water
Annular volume = 407' * 0.2526 ft3/ft = 102.8 ft3
Excess = 25%
Annular volume w/ excess = 102.8 ft3 * 1.25 = 128.5 ft3
Tail Cement Requirement = 100 sks 1.29 cf/sk

Displacement Volume:

10,000' * 0.0232 bbl/ft = 232 bbls

- A detailed cement program is included. See Attachment "C"

6. **Mud Program** (visual monitoring)

Interval	Mud Type	Weight	Viscosity	Fluid Loss
0'-2,400'	Water/Gel/Lime/Native Clays	8.3-8.6 ppg	33-36 sec/qt	N/C
2,400'-12,500'	KCl/Polymer or DAP/Polymer	9.0-9.3 ppg	38-42 sec/qt	8-10cc

Sufficient mud materials to maintain mud properties, control lost circulation, contain a "gas" kick, and rebuild an active mud system will be available on location during drilling operations.

7. **Testing, Logging, Coring**

a. Drill stem tests – non anticipated
b. Electric logs - DIL/SP/GR, FDC/CNL/CAL/PE/GR, BHC sonic/GR all from TD to surface
c. Coring – possible sidewall coring in the Dakota, Cedar Mountain, Morrison and Entrada.

8. **Anticipated Bottom Hole Pressure and Temperature, and other Potential Hazards**

A. Bottom Hole Pressure:

Maximum anticipated bottom hole pressure is 4,375 psi (calculated at 0.35 psi/ft. at the 12,500' (TVD) level of the Wingate). This pressure gradient was calculated from a bottom hole pressure buildup tests conducted on four separate wells located in Section 29, T14S-R20E. These wells are the closest wells to the subject well completed in the same deep zones. Therefore the maximum anticipated surface pressure is 1,625 psi (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/ft.).

B. Bottom Hole Temperature:

The bottom hole temperature anticipated in this wellbore is approximately 230 degrees Fahrenheit at 12,500' TVD. This anticipated temperature is consistent with the temperatures encountered in the other four deep wells drilled in this area.

C. Abnormal Pressures or Temperatures:

As demonstrated above, no abnormal pressures or temperatures are anticipated in this well.

D. Potential Hazards:

No hydrogen sulfide (H_2S) gas or other potential hazards have been encountered or are known to exist in any well drilled to similar depths in the general area.

9. **Anticipated Starting Date and Duration**

Spud Date: Upon governmental approval and drilling rig availability

Duration of Operations:

1) Drilling: Approximately 40 days.
2) Completion: Approximately 30 days

Drilling Notification:

Prior to location construction, moving in the drilling rig and spudding the well, the Vernal field office of the BLM will be notified of our intentions to commence operations, unless otherwise instructed in the site specific conditions of approval.

SURFACE USE PLAN
MILLER, DYER & CO. LLC

Ute Tribal #3-32-14-20
NENW Section 32 T14S-R20E

1. Existing Roads:
   a. Topographic Map "A" shows the vicinity of the well, including a portion of the Agency Draw Road. This road is reached from Ouray, Utah, by following the Seep Ridge Road south to Buck Canyon; taking the Buck Canyon road west to the Willow Creek Road; then north on the Willow Creek Road to Santio Crossing, which is at the junction of the Willow Creek Road and the Agency Draw Road.
   b. Topographic Map "B" shows the point approximately 53 miles south of Ouray where the access road to the well departs from the Agency Draw Road. Continue 0.3 mile north then 0.1 mile east of the Flat Rock Mesa Road The access road is 80' southeast to the Ute Tribal 3-32-14-20.

2. Planned Access Road: (refer to Topographic Map "D")
   a. Length of new road route will be approximately 80 feet.
   b. The right-of-way width is 55' (27.5' on either side of the centerline) with a 20-foot wide running surface.
   c. Maximum grade will be less than 2%
   d. No turn-outs are planned.
   e. The new road will be crowned, ditched and dipped to provide adequate drainage.
   f. Culverts will be used if necessary.
   g. No gates are cattle guards will be needed. Nor will any existing facilities be modified.
   h. The proposed road was flagged when the location was staked.
   i. The authorized officer will be contacted at least 24 hours in advance of commencement of construction of the access road and well pad.

3. Location of Existing Wells:
   a. The nearest producing well is the Ute Tribal #32-1A, located approximately 525' northeast of the proposed well location in Section 28-T14S-R20E.

4. Location of Existing and/or Proposed Facilities:
   a. There are no existing facilities on the proposed well pad. All proposed facilities will be contained within the proposed location site (see attached "Location Layout"). Topographic Map "D" shows the proposed route for a gas line, to be co-located in the access road right-of-way, and connected to the Miller, Dyer & Co. LLC gathering system.
   b. The operator will submit information concerning proposed on and off well pad facilities once production has been established by applying for approval of subsequent operations.

5. Location and Type of Water Supply:
   a. Miller, Dyer & Co. existing water supply well the Ute Tribal 30-4A, located in the NENW Section 30-T14S-R20E on Indian surface has been approved by the Ute Indian Tribe. The existing BIA water permit number for the well is #14-20-H62-5069.
   b. Some produced water from existing wells may be used for drilling. Fresh water may also be taken at a point of diversion at Santio Crossing from Willow Creek in the SESE Section 29-T12S-R21E, SLB&M, if available during the drought. This water will be taken under the terms of the Ute Oilfield Water Service's state filing.
   c. Water will be transported by truck on the Agency Draw and Flat Rock Mesa roads.

6. Source of Construction Materials:
   a. It is anticipated that any construction materials will be needed for the drilling phase of this project. Gravel, shale or road base materials needed to upgrade access roads and well pad will be obtained from the operator's pit located on SITLA land near Chimney Rock.
   b. The entire well site and all access roads to be upgraded for built are located on lands held in trust by the federal government for the Ute Indian Tribe.
   c. All construction materials used in building the well pad and access road will be native materials accumulated during construction. In the event that additional materials are needed, they will be obtained from the operator's existing pit on SILTA land or from private sources.

7. Methods for Handling Waste Disposal:
   a. Methods and locations for safe containment and disposal of the following materials:
      1. Drill cuttings will be buried in the reserve pit.
      2. Garbage and trash will be contained in trash baskets and hauled to a sanitary landfill. There will be no burning of trash on the location at any time.
      3. Salts will be kept in proper containers and salvaged for future use or disposed of at an approved facility.
      4. Chemicals will be kept in proper containers and salvaged for future use or disposed of at an approved facility.
      5. Sewage waste will be contained in portable chemical toilets serviced by a commercial sanitary service.

   b. Drilling fluids will be contained in the reserve pit and mud tanks. To the extent possible, drilling fluids and water will be saved for use at future drilling locations. Unusable drilling fluids and water will be disposed of in an approved manner upon the completion of the well.

   c. No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater that 10,000 pounds will be used, produced,

stored, transported, or disposed of annually in association with the drilling, testing, of this well. Furthermore, extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will not be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completing of this well.

d. Reserve pit and waste water disposal:
    1. The reserve pit will be constructed so as not to lead, break, or allow the discharge of fluids.
    2. The reserve pit will be lined with 12 mil plastic nylon reinforced liner installed over sufficient bedding material to cover any exposed rocks. The pit will be fenced on three sides with 39" net wire, topped with a minimum of one strand of barbed wire. All wire will be stretched prior to attachment to the corner posts. The fourth side will be fenced when drilling activities are completed to allow drying.
    3. The closure of the reserve pit will follow the Guidance for Reserve Pit Closure as found in the Environmental Handbook of the State of Utah, Division of Oil, Gas & Mining.
        a) The reserve pit will be closed within one year following drilling and completion of a well (R649-16.3).
        b) Liquid in a pit will be allowed to either evaporate or be removed. If removed, it will be disposed of properly, some options are injection (in this well or another), hauled to a permitted disposal facility, or re-used at another well.
        c) The pit liner may be cut off above the cuttings/mud level and hauled to a landfill, or folded in and processed along with other pit contents and covered. No remnants of liner material will be exposed at the surface when pit closure is complete. Pit area will be mounded so as not to allow ponding of water and drainage diverted around as not to allow erosion of the old pit site.
    4. A closed drilling system will not be used as there is no irrigable land, floodplains, or lands under crop production.
    5. In accordance with Onshore Order No. 7, a permanent disposal method and location will be applied for within 90 days of establishing production.
    6. After first production:
        a) Produced waste water will be confined to the reserve pit, or a storage tank for a period not to exceed 90 days.
        b) During the 90 day period, in accordance with Onshore Order No. 7, an application for approval of a permanent disposal method and location, along with the required water analysis will be submitted to the authorized officer.
        c) No produced water will be used for dust or weed control of any kind. Should spills of oil, produced water, or hazardous materials occur, the area of the spill will be re-mediated

and contaminated soil and recovered oil or hazardous materials will be hauled to an approved disposal facility.

8. Ancillary Facilities:
   a. No airstrips will be built. Mobile living quarters and office facilities for supervisors, geologists, mud engineers, mud loggers and air compressor personnel will be confined to the drilling location as shown on the "Location Layout" diagram. The drilling crew will be housed on location.

9. Well Site Layout:
   a. Refer to attached "Typical Cross Section" diagram for cuts and fills and relation to topography.
   b. Refer to "Location Layout" diagram for location of mud tanks, reserve and flare pits, pipe racks, living facilities and top soil stockpiles.
   c. Refer to "Location Layout" diagram for rig orientation, access road and parking area. Parking area will be in the northeast corner of the location.

10. Plans for Restoration of the Surface:
   a. Producing well location
      1. Immediately upon well completion the location and surrounding area will be cleared of all tubing, equipment, debris, materials, trash and junk not required for production.
      2. Immediately upon well completion any hydrocarbons on the reserve pit will be removed and disposed of properly.
      3. The reserve pit and that portion of the location not needed for production facilities/operations will be re-contoured to the approximate natural contours. The reserve pit will be reclaimed within 90 days of the date of well completion, or as soon thereafter as is practical. Before any dirt work takes place, the reserve pit must be completely dry and all cans, barrels, pipe, etc removed. The liner will be perforated and torn prior to backfilling.
      4. Access roads will be graded and maintained to prevent erosion and accommodate year-round traffic.
      5. All disturbed areas not needed for operations will be seeded with the mixture required by the BIA in the manner specified by the BIA.

   b. Dry Hole/Abandoned Location
      1. At such time as it is determined that the well is to be plugged and abandoned, the operator will submit a subsequent report of abandonment to the BLM and the BIA. The BLM will attach plugging conditions of approval, and the BIA will attach conditions of approval for the restoration of the surface.

11. Surface Ownership:
   a. Access roads and location are held in trust for the Ute Indian Tribe by the Unites States. The operator has obtained a right-of-way with the BIA and

submitted payment for damages as specified in its Exploration and Development Agreement with the Ute Indian Tribe.

12. Additional Information:
    a. The operator will inform all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator will immediately stop work that might further disturb such materials, and will inform the assigned monitor and the authorized officer (AO) at the BIA. Within five working days the AO will inform the operator as to:
        1. Whether the materials appear to be eligible for the National Register of Historic Places;
        2. The mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and
        3. A time frame for the AO to complete an expedited review under 36 CFR 900.11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

    b. If the operator wishes at any time to relocate activities to avoid the cost of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that required mitigation has been completed, the operator will be allowed to resume construction.
    c. At the request of the Ute Indian Tribe, a 30'-wide fire break will be bladed around the perimeter of the location.

Bonding:

Please be advised that Miller, Dyer & Co. LLC is considered to be the operator of the Ute Tribal #3-32-14-20 well; NENW of Section 32, T14S-R20E Uintah County, Utah; and all producing zones; and is responsible for the operations conducted upon the leased lands. Bond coverage is provided by Certificate of Deposit #UTB000058.

Operator's Certification:

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am

responsible for the operation conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

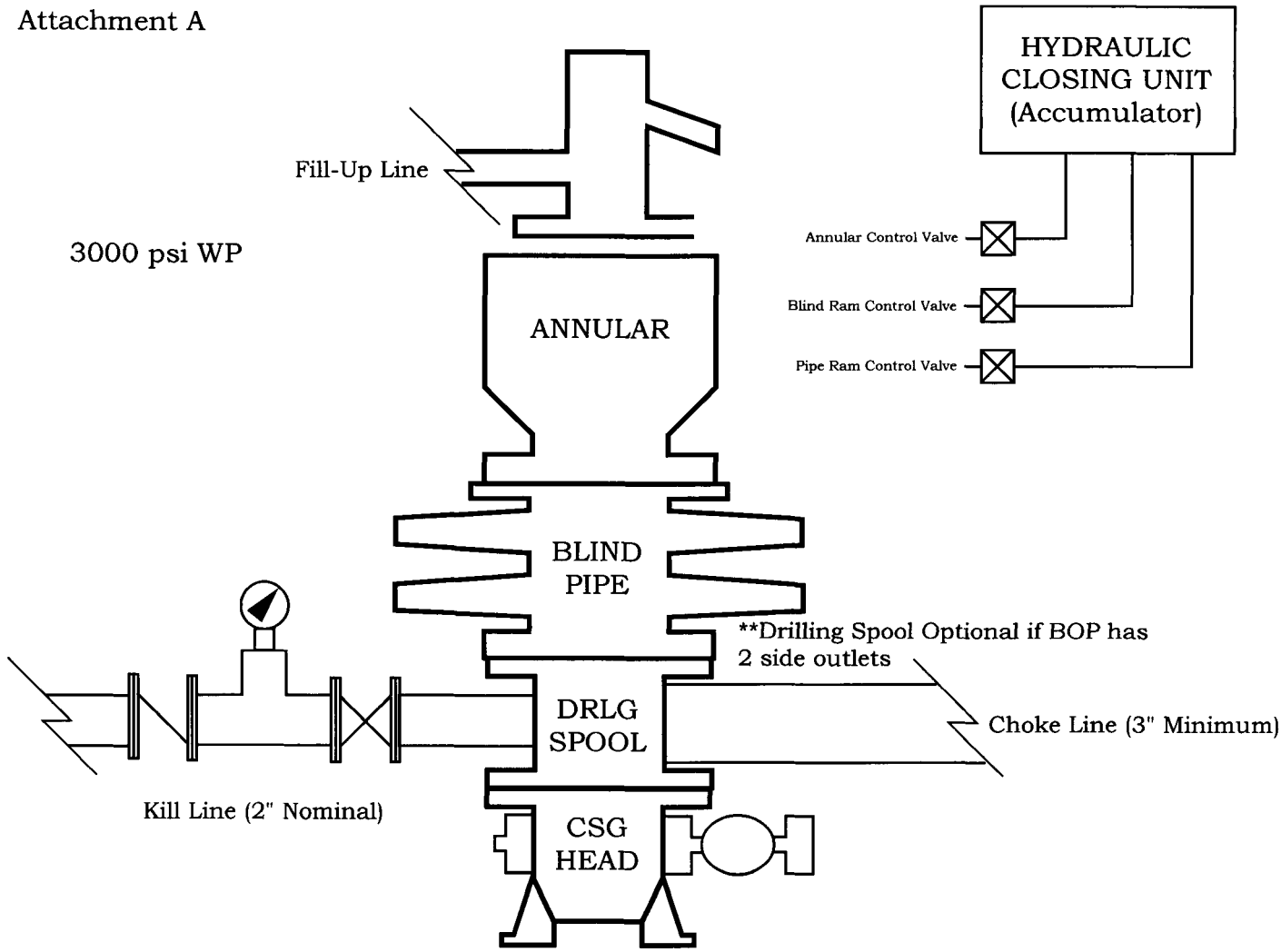
Executed this 23rd day of October, 2007.

Jeffrey H. Lang
Vice President of Operations
Miller, Dyer & Co. LLC
475 17th Street, Suite 1200
Denver, CO 80202
Office: 303 292 0949 Ext 102
FAX: 303 292 3901
Cell: 303 503 3730
Email: jeff@millerdyer.com

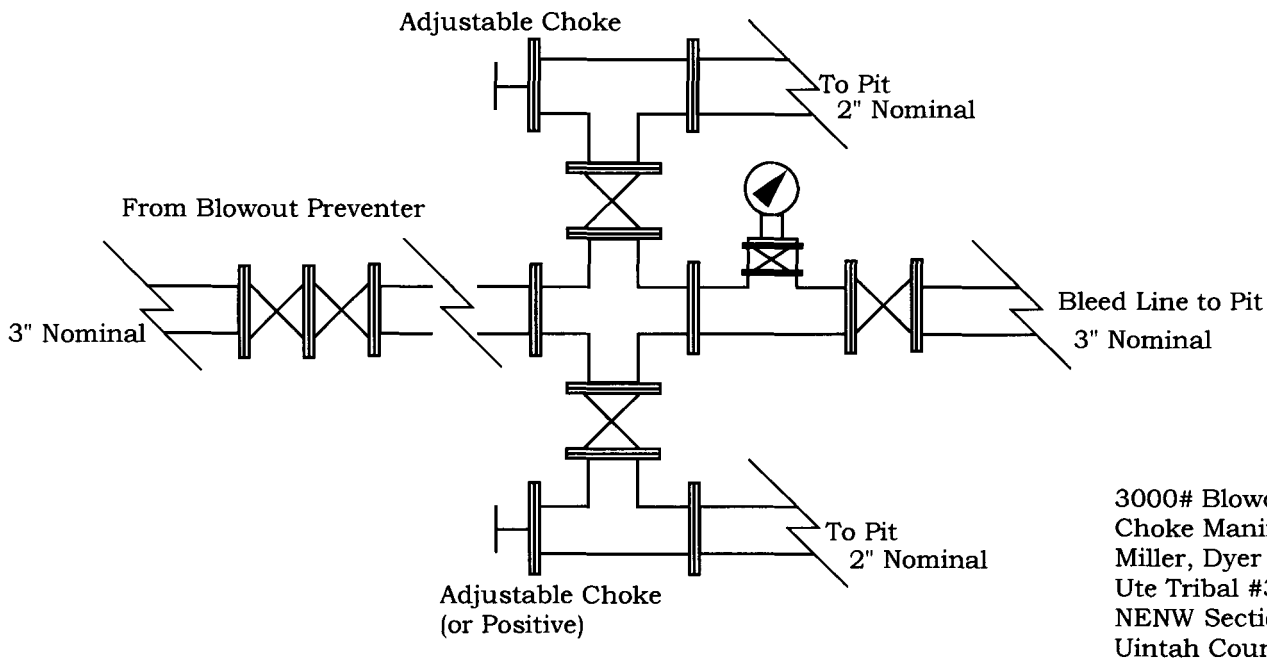
Jeffrey H. Lang
Vice President of Operations

The Onsite Inspection for this well will be conducted after the APD has been submitted to the BLM as per the new requirements of Onshore Order #1 dated March 7, 2007.

Attachment A



Choke Manifold Requirement (3000 psi WP)



3000# Blowout Preventer &
Choke Manifold Schematic
Miller, Dyer & Co. LLC
Ute Tribal #3-32-14-20
NENW Section 32 T14S-R20E
Uintah County, Utah

ATTACHMENT B

IMPORTANT NOTICE: **This information should be checked by the engineer responsible for the design to insure its accuracy. U. S. Steel makes no express or implied warranty of any kind in respect either to the information furnished or the materials referred to or as to the suitability thereof for any particular application, use or purpose, and expressly disclaims any and all such warranties. Anyone making use of this information does so at their own risk and assumes full responsibility as to its suitability for the use intended and any and all liability resulting from such use.**

Date: 09-26-2007 16:42

U. S. STEEL GENERATED CHECK STRING DESIGN

CASING COMBINATION DESIGN NO	C01560
SUBMITTED BY	Jeff Lang
CUSTOMER	Miller, Dyer & Co. LLC
OUTSIDE DIAMETER	9.625
MUD WEIGHT	9.300
SOUR SERVICE	NO

ITEM NUMBER	LENGTH FEET	ZONE FEET	WEIGHT LB/FT	GRADE	JOINT TYPE	SECTION WEIGHT LB	TOTAL WEIGHT LB
1	3300	0-3300	36	J-55	SHORT ROUND	118800	118800

********** SAFETY-FACTORS **********					
ITEM NUMBER	**EXTERNAL PRESSURE COLLAPSE**	**TENSION YIELD STRENGTH**	**TENSION ULTIMATE STRENGTH**	**INTERNAL YIELD PRESSURE**	**LEAK RESISTANCE**
TARGET	1.125	1.250	1.800	1.000	1.000
1	1.268	3.757	3.313	2.208	5.309

Note: Safety Factors for Internal Yield Pressure (Pipe or joint) and Leak Resistance are based on an Internal Pressure of 1594 PSI.

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Date: 09-26-2007 16:34

U. S. STEEL GENERATED CHECK STRING DESIGN

CASING COMBINATION DESIGN NO	C01546
SUBMITTED BY	Jeff Lang
CUSTOMER	Miller, Dyer & Co. LLC
OUTSIDE DIAMETER	5.500
MUD WEIGHT	9.300
SOUR SERVICE	NO

ITEM NUMBER	LENGTH FEET	ZONE FEET	WEIGHT LB/FT	GRADE	JOINT TYPE	SECTION WEIGHT LB	TOTAL WEIGHT LB
1	1200	0-1200	17	N-80	BUTTRESS	20400	212500
2	9800	1200-11000	17	N-80	LONG ROUND	166600	192100
3	1500	11000-12500	17	P-110	LONG ROUND	25500	25500

********** SAFETY-FACTORS **********					
ITEM NUMBER	**EXTERNAL PRESSURE COLLAPSE**	**TENSION YIELD STRENGTH**	**TENSION ULTIMATE STRENGTH**	**INTERNAL YIELD PRESSURE**	**LEAK RESISTANCE**
TARGET	1.125	1.250	1.800	1.000	1.000
1	8.287	1.868	2.099	1.282	2.666
2	1.158	1.561	1.809	1.282	2.181
3	1.239	16.165	17.450	1.762	2.181

Note: Safety Factors for Internal Yield Pressure (Pipe or joint) and Leak Resistance are based on an Internal Pressure of 6038 PSI.

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Date: 09-26-2007 16:35

U. S. STEEL GENERATED CHECK STRING DESIGN

CASING COMBINATION DESIGN NO	C01547
SUBMITTED BY	Jeff Lang
CUSTOMER	Miller, Dyer & Co. LLC
OUTSIDE DIAMETER	5.500
MUD WEIGHT	9.300
SOUR SERVICE	NO

ITEM NUMBER	LENGTH FEET	ZONE FEET	WEIGHT LB/FT	GRADE	JOINT TYPE	SECTION WEIGHT LB	TOTAL WEIGHT LB
1	1200	0-1200	17	P-110	LONG ROUND	20400	212500
2	9800	1200-11000	17	N-80	LONG ROUND	166600	192100
3	1500	11000-12500	17	P-110	LONG ROUND	25500	25500

********** SAFETY-FACTORS **********					
ITEM NUMBER	**EXTERNAL PRESSURE COLLAPSE**	**TENSION YIELD STRENGTH**	**TENSION ULTIMATE STRENGTH**	**INTERNAL YIELD PRESSURE**	**LEAK RESISTANCE**
TARGET	1.125	1.250	1.800	1.000	1.000
1	11.277	1.940	2.094	1.762	2.181
2	1.158	1.561	1.809	1.282	2.181
3	1.239	16.165	17.450	1.762	2.181

Note: Safety Factors for Internal Yield Pressure (Pipe or joint) and Leak Resistance are based on an Internal Pressure of 6038 PSI.

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Proposal No: 179969767A

ATTACHMENT C

Miller, Dyer & Co.,LLC
Flat Rock Generic

Uintah County, Utah
September 25, 2007

Well Proposal

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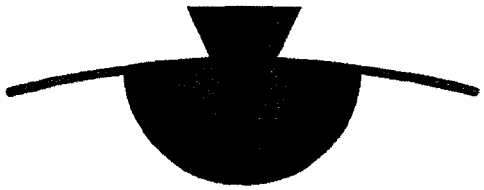

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Service Representatives:
Clark Emrich
Technical Account Manager
Denver, Colorado
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Email: cemrich@bjservices.com
Mobile: (303) 549-4180

JOB AT A GLANCE

Depth (TVD)	3,300 ft
Depth (MD)	3,300 ft
Hole Size	12.25 in
Casing Size/Weight :	9 5/8 in, 36 lbs/ft
Pump Via	9 5/8" O.D. (8.921" .I.D) 36
Total Mix Water Required	9,357 gals
Pre-Flush	
Water	40 bbls
Density	8.4 ppg
Lead Slurry	
Premium Lite II Cement	403 sacks
Density	11.0 ppg
Yield	3.38 cf/sack
Tail Slurry	
Class G + Additives	217 sacks
Density	15.8 ppg
Yield	1.17 cf/sack
Displacement	
Water	252 bbls
Density	8.4 ppg

STIMULATION . CEMENTING . COMPLETION SERVICES . SERVICE TOOLS . COILED TUBING
PRODUCTION CHEMICALS . CASING AND TUBING RUNNING SERVICES . PIPELINE SERVICES . WELL CONTROL

WELL DATA

ANNULAR GEOMETRY

ANNULAR I.D. (in)	DEPTH(ft)	
	MEASURED	TRUE VERTICAL
19.500 CASING	40	40
12.250 HOLE	3,300	3,300

SUSPENDED PIPES

DIAMETER (in)		WEIGHT	DEPTH(ft)	
O.D.	I.D.	(lbs/ft)	MEASURED	TRUE VERTICAL
9.625	8.921	36	3,300	3,300

Float Collar set @	3,260 ft
Mud Density	8.50 ppg
Mud Type	Water Based
Est. Static Temp.	120 ° F
Est. Circ. Temp.	97 ° F

VOLUME CALCULATIONS

40 ft	x	1.5687 cf/ft	with	0 % excess	=	62.7 cf
2,760 ft	x	0.3132 cf/ft	with	50 % excess	=	1296.6 cf
500 ft	x	0.3132 cf/ft	with	50 % excess	=	234.9 cf
40 ft	x	0.4341 cf/ft	with	0 % excess	=	17.4 cf (inside pipe)
				TOTAL SLURRY VOLUME	=	1611.6 cf
					=	287 bbls

VERIFY TUBULAR CONFIGURATION, PROCEDURE, AND PROPER DISPACEMENT DEPTH WITH CUSTOMER REPRESENTATIVE PRIOR TO PUMPING.

BHST has been estimated from 1.2 deg/100 ft gradient with an 80 degree ambient rock temperature. The BHCT has been calculated using API standards.

STIMULATION . CEMENTING . COMPLETION SERVICES . SERVICE TOOLS . COILED TUBING
PRODUCTION CHEMICALS . CASING AND TUBING RUNNING SERVICES . PIPELINE SERVICES . WELL CONTROL

FLUID SPECIFICATIONS

Pre-Flush 40.0 bbls Water @ 8.4 ppg

FLUID	VOLUME CU-FT	VOLUME FACTOR	AMOUNT AND TYPE OF CEMENT
Lead Slurry	1359	/ 3.3	= 403 sacks Premium Lite II Cement + 3% bwow Potassium Chloride + 0.25 lbs/sack Cello Flake + 5 lbs/sack Kol Seal + 10% bwoc Bentonite + 0.5% bwoc Sodium Metasilicate + 196.8% Fresh Water
Tail Slurry	252	/ 1.1	= 217 sacks Class G Cement + 2% bwoc Calcium Chloride + 0.25 lbs/sack Cello Flake + 44.3% Fresh Water

Displacement 252.0 bbls Water @ 8.4 ppg

CEMENT PROPERTIES

	SLURRY NO. 1	SLURRY NO. 2
Slurry Weight (ppg)	11.00	15.80
Slurry Yield (cf/sack)	3.38	1.17
Amount of Mix Water (gps)	20.53	5.00
Estimated Pumping Time - 70 BC (HH:MM)	5:00	2:00
COMPRESSIVE STRENGTH		
24 hrs @ 95 ° F (psi)	400	3500

THICKENING TEST TIMES ARE ESTIMATES. SLURRIES ARE SUBJECT TO CHANGE BASED ON TEST RESULTS FROM THE REGION LABORATORY.

SLURRY VOLUMES ARE ESTIMATED AND ARE SUBJECT TO CUSTOMER VERIFICATION.

PLEASE DOCUMENT HOW LONG WELL HAS BEEN CIRCULATED PRIOR TO CEMENTING AND INCLUDE ANY OTHER IMPORTANT ISSUES ON THE CEMENT REPORT.

STIMULATION . CEMENTING . COMPLETION SERVICES . SERVICE TOOLS . COILED TUBING
PRODUCTION CHEMICALS . CASING AND TUBING RUNNING SERVICES . PIPELINE SERVICES . WELL CONTROL

JOB AT A GLANCE

Depth (TVD)	12,500 ft
Depth (MD)	12,500 ft
Hole Size	8.75 in
Casing Size/Weight :	5 1/2in, 17 lbs/ft
Pump Via	5 1/2" O.D. (4.892" .I.D) 17
Total Mix Water Required	16,908 gals
Stage No: 1	**Float Collar set @** 12,460 ft
Spacer	
2% KCl Water	20 bbls
Density	8.4 ppg
Mud Wash	
Mud Clean I	1,000 gals
Density	8.4 ppg
Spacer	
2% KCl Water	20 bbls
Density	8.4 ppg
1st Tail Slurry	
50:50:2 (Poz:G:Gel) + Add's	480 sacks
Density	14.4 ppg
Yield	1.65 cf/sack
Displacement	
Drilling Mud	290 bbls
Density	9.5 ppg

STIMULATION . CEMENTING . COMPLETION SERVICES . SERVICE TOOLS . COILED TUBING
PRODUCTION CHEMICALS . CASING AND TUBING RUNNING SERVICES . PIPELINE SERVICES . WELL CONTROL

JOB AT A GLANCE (Continued)

Stage No: 2	**Stage Collar set @** 10,000 ft
Pre-Flush	
2% KCl Water	20 bbls
Density	8.4 ppg
Mud Wash	
Mud Clean I	1,000 gals
Density	8.4 ppg
Spacer	
2% KCl Water	20 bbls
Density	8.4 ppg
2nd Lead Slurry	
Premium Lite II + Add's	674 sacks
Density	11.2 ppg
Yield	3.15 cf/sack
2nd Tail Slurry	
50:50:2 (Poz:G:Gel) + Add's	100 sacks
Density	14.2 ppg
Yield	1.29 cf/sack
Displacement	
2% KCl Water	232 bbls
Density	8.4 ppg

STIMULATION • CEMENTING • COMPLETION SERVICES • SERVICE TOOLS • COILED TUBING
PRODUCTION CHEMICALS • CASING AND TUBING RUNNING SERVICES • PIPELINE SERVICES • WELL CONTROL

WELL DATA

ANNULAR GEOMETRY

ANNULAR I.D. (In)	DEPTH(ft)	
	MEASURED	TRUE VERTICAL
8.921 CASING	3,300	3,300
8.750 HOLE	12,500	12,500

SUSPENDED PIPES

DIAMETER (In)		WEIGHT (lbs/ft)	DEPTH(ft)	
O.D.	I.D.		MEASURED	TRUE VERTICAL
5.500	4.892	17	12,500	12,500

STAGE: 1

Float Collar set @	12,460 ft
Mud Density	9.50 ppg
Mud Type	Water Based
Est. Static Temp.	236 ° F
Est. Circ. Temp.	184 ° F

VOLUME CALCULATIONS

2,500 ft	x	0.2526 cf/ft	with	25 % excess	=	787.0 cf
40 ft	x	0.1305 cf/ft	with	0 % excess	=	5.2 cf (inside pipe)
				TOTAL SLURRY VOLUME	=	792.2 cf
					=	141 bbls

STAGE: 2

Stage Collar set @	10,000 ft
Mud Density	9.50 ppg
Est. Static Temp.	205 ° F
Est. Circ. Temp.	155 ° F

VOLUME CALCULATIONS

500 ft	x	0.2691 cf/ft	with	0 % excess	=	134.5 cf
6,293 ft	x	0.2526 cf/ft	with	25 % excess	=	1986.9 cf
407 ft	x	0.2526 cf/ft	with	25 % excess	=	128.6 cf
				TOTAL SLURRY VOLUME	=	2250.0 cf
					=	401 bbls

STIMULATION . CEMENTING . COMPLETION SERVICES . SERVICE TOOLS . COILED TUBING
PRODUCTION CHEMICALS . CASING AND TUBING RUNNING SERVICES . PIPELINE SERVICES . WELL CONTROL

WELL DATA (Continued)

VERIFY TUBULAR CONFIGURATION, PROCEDURE, AND PROPER DISPACEMENT DEPTH WITH CUSTOMER REPRESENTATIVE PRIOR TO PUMPING.

BHST has been estimated from 1.25 deg/100 ft gradient with an 80 degree ambient rock temperature. The BHCT has been calculated using API standards. PLEASE CONFIRM ACTUAL BHST TO ENSURE ACCURATE CEMENT TESTING IS PERFORMED.

STIMULATION . CEMENTING . COMPLETION SERVICES . SERVICE TOOLS . COILED TUBING
PRODUCTION CHEMICALS . CASING AND TUBING RUNNING SERVICES . PIPELINE SERVICES . WELL CONTROL

FLUID SPECIFICATIONS

STAGE NO.: 1

Spacer	20.0 bbls 2% KCl Water @ 8.43 ppg
Mud Wash	1,000.0 gals Mud Clean I @ 8.4 ppg
Spacer	20.0 bbls 2% KCl Water @ 8.43 ppg

FLUID	VOLUME CU-FT	VOLUME FACTOR	AMOUNT AND TYPE OF CEMENT
1st Tail Slurry	792	/ 1.6	= 480 sacks (50:50) Poz (Fly Ash):Class G Cement + 0.05 lbs/sack Static Free + 0.2% bwoc R-3 + 3% bwow Potassium Chloride + 0.25 lbs/sack Cello Flake + 0.9% bwoc FL-25 + 1 gals/100 sack FP-6L + 2% bwoc Bentonite + 35% bwoc Silica Flour + 0.2% bwoc BA-59 + 70.7% Fresh Water
Displacement			289.7 bbls Drilling Mud @ 9.5 ppg

CEMENT PROPERTIES

	SLURRY NO. 1
Slurry Weight (ppg)	14.40
Slurry Yield (cf/sack)	1.65
Amount of Mix Water (gps)	7.12
Amount of Mix Fluid (gps)	7.13
Estimated Pumping Time - 70 BC (HH:MM)	4:00
COMPRESSIVE STRENGTH	
24 hrs @ 230 ° F (psi)	3000

FLUID SPECIFICATIONS (Continued)

STAGE NO.: 2

Pre-Flush	20.0 bbls 2% KCl Water @ 8.43 ppg
Mud Wash	1,000.0 gals Mud Clean I @ 8.4 ppg
Spacer	20.0 bbls 2% KCl Water @ 8.43 ppg

FLUID	VOLUME CU-FT	VOLUME FACTOR	AMOUNT AND TYPE OF CEMENT
2nd Lead Slurry	2121	/ 3.1	= 674 sacks Premium Lite II Cement + 3 lbs/sack CSE + 0.3% bwoc R-3 + 3% bwow Potassium Chloride + 10% bwoc Bentonite + 0.2% bwoc Sodium Metasilicate + 183.6% Fresh Water
2nd Tail Slurry	129	/ 1.2	= 100 sacks (50:50) Poz (Fly Ash):Class G Cement + 0.05% bwoc Static Free + 0.1% bwoc R-3 + 3% bwow Potassium Chloride + 0.9% bwoc FL-25 + 1 gals/100 sack FP-6L + 2% bwoc Bentonite + 0.2% bwoc Sodium Metasilicate + 0.2% bwoc BA-59 + 57.3% Fresh Water

Displacement 232.5 bbls 2% KCl Water @ 8.43 ppg

CEMENT PROPERTIES

	SLURRY NO. 1	SLURRY NO. 2
Slurry Weight (ppg)	11.20	14.20
Slurry Yield (cf/sack)	3.15	1.29
Amount of Mix Water (gps)	19.16	5.77
Amount of Mix Fluid (gps)	19.16	5.78
Estimated Pumping Time - 70 BC (HH:MM)	5:00	4:30
COMPRESSIVE STRENGTH		
24 hrs @ 200 ° F (psi)		1800

THICKENING TEST TIMES ARE ESTIMATES. SLURRIES ARE SUBJECT TO CHANGE BASED ON TEST RESULTS FROM THE REGION LABORATORY.

SLURRY VOLUMES ARE ESTIMATED AND ARE SUBJECT TO CHANGE BASED ON CALIPER LOG MEASUREMENTS.

PLEASE DOCUMENT HOW LONG WELL HAS BEEN CIRCULATED PRIOR TO CEMENTING AND INCLUDE ANY OTHER IMPORTANT ISSUES ON THE CEMENT REPORT.

CONDITIONS

BJ Services' performance of services and sale of materials is expressly conditioned upon the applicability of the Terms and Conditions contained in the current BJ Services Price Book. The Terms and Conditions include, among other things, an indemnity in favor of BJ Services from Customer for damage to the well bore, reservoir damage, loss of the hole, blowouts and loss of control of the well, even if caused by the negligence or other fault of BJ Services. The Terms and Conditions also limit the warranties provided by the BJ Services and the remedies to which Customer may be entitled in the event of a breach of warranty by BJ Services. For these reasons, we strongly recommend that you carefully review a copy of the Terms and Conditions. **If you do not have a copy of the BJ Services Price Book, you can view the Terms and Conditions on BJ Services Web Site, www.bjservices.com. By requesting that BJ Services perform the services described herein, Customer acknowledges that such Terms and Conditions are applicable to the services. Further, by requesting the services, Customer warrants that its representative on the well location or other service site will be fully authorized to acknowledge such Terms and Conditions by executing a Field Receipt or other document presented by BJ Services containing such Terms and Conditions.**

In the event that Customer and BJ Services have executed a Master Services Agreement covering the work to be performed, such Master Services Agreement shall govern in place of the Terms and Conditions. If you are interested in entering into Master Services Agreement with BJ Services, please contact us through the "Go BJ" button on the BJ Services Web Site.

PRODUCT DESCRIPTIONS

BA-59
A free flowing powder which provides improved bonding and minimizes gas migration. Provides expansion properties and zero free water to cement slurries.

Bentonite
Commonly called gel, It is a clay material used as a cement extender and to control excessive free water.

CSE
Compressive Strength Enhancer - Fumed Silica. An additive which contributes to low density, high compressive
strength development of cement slurries at all temperature ranges. This material also controls free water

Calcium Chloride
A powdered, flaked or pelletized material used to decrease thickening time and increase the rate of strength development.

Cello Flake
Graded (3/8 to 3/4 inch) cellophane flakes used as a lost circulation material.

Class G Cement
Intended for use as a basic cement from surface to 8000 ft as manufactured, or can be used with accelerators and retarders to cover a wide range of well depths and temperatures.

FL-25
An all purpose salt-tolerant fluid loss additive that provides exceptional fluid loss control across a wide range of temperatures and salinity conditions and remedial cementing applications.

FP-6L
A clear liquid that decreases foaming in slurries during mixing.

Kol Seal
A granular, lightweight material (specific gravity of 1.3) used to control lost circulation in zones of natural and induced fractures, cavities and high permeability.

Mud Clean I
A water-based non-acid solution used as a wash between the drilling mud and cement.

Potassium Chloride
A granular salt used to reduce clay swelling caused by water-base stimulation fluids.

Poz (Fly Ash)
A synthetic pozzolan, (primarily Silicon Dioxide). When blended with cement, Pozzolan can be used to create lightweight cement slurries used as either a filler slurry or a sulfate resistant completion cement.

Premium Lite II Cement
Premium Lite II is a high-yield, cost effective lightweight cement blend that provides exceptional compressive strength and reduced permeability when mixed at low slurry weights.

STIMULATION . CEMENTING . COMPLETION SERVICES . SERVICE TOOLS . COILED TUBING
PRODUCTION CHEMICALS . CASING AND TUBING RUNNING SERVICES . PIPELINE SERVICES . WELL CONTROL . CHEMICAL SERVICES

PRODUCT DESCRIPTIONS (Continued)

R-3
A low temperature retarder used in a wide range of slurry formulations to extend the slurry thickening time.

Silica Flour
A very fine (200 mesh) Silica Flour for use in fracturing fluids and acids to help control fluid-loss in small micro fissures of naturally fractured formations. Normal loadings range from 10 to 50 pounds per 1,000 gallons of fluid. It is used in cementing to prevent strength retrogression at high temperatures.

Sodium Metasilicate
An accelerator used to decrease the thickening time of cement slurries.

Static Free
An anti-static additive used to prevent air entrainment due to agglomerated particles. Can be used in Cementing and Fracturing operations to aid in the flow of dry materials.

STIMULATION . CEMENTING . COMPLETION SERVICES . SERVICE TOOLS . COILED TUBING
PRODUCTION CHEMICALS . CASING AND TUBING RUNNING SERVICES . PIPELINE SERVICES . WELL CONTROL . CHEMICAL SERVICES

End of Report

MILLER, DYER & CO. LLC

Ute Tribal 3-32-14-20
Section 32, T14S, R20E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14 MILES TO THE JUNCTION OF STATE HIGHWAY 88. EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION ALONG STATE HIGHWAY 88 APPROXIMATELY 17 MILES TO OURAY, UTAH. FROM OURAY, PROCEED IN A SOUTHERLY DIRECTION ALONG THE SEEP RIDGE ROAD (COUNTY B ROAD 2810) APPROXIMATELY 29.4 MILES TO ITS INTERSECTION WITH THE BUCK CANYON ROAD (COUNTY B ROAD 5460). EXIT RIGHT AND PROCEED IN A SOUTHWESTERLY DIRECTION ALONG COUNTY B ROAD 5460 APPROXIMATELY 3.2 MILES TO WILLOW CREEK. TURN RIGHT AND PROCEED IN A NORTHWESTERLY DIRECTION ALONG THE WILLOW CREEK ROAD (COUNTY B ROAD 5120) APPROXIMATELY 2.1 MILES TO ITS INTERSECTION WITH THE AGENCY DRAW ROAD (COUNTY B ROAD 5340). EXIT LEFT AND PROCEED IN A WESTERLY THEN SOUTHWESTERLY DIRECTION ALONG COUNTY B ROAD 5340 APPROXIMATELY 2.5 MILES TO ITS INTERSECTION WITH THE FLAT ROCK ROAD (COUNTY B ROAD 5450). EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION ALONG COUNTY B ROAD 5450 APPROXIMATELY 10.9 MILES TO THE FLAT ROCK MESA ROAD. PROCEED IN A SOUTHWESTERLY DIRECTION ALONG THE FLAT ROCK MESA ROAD APPROXIMATELY 2.8 MILES TO ITS INTERSECTION WITH THE BLACK KNOLLS ROAD. CONTINUE IN A WESTERLY THEN NORTHWESTERLY DIRECTION ALONG THE FLAT ROCK MESA ROAD APPROXIMATELY 2.9 MILES TO THE NORTH FORK OF THE FLAT ROCK MESA ROAD. EXIT RIGHT AND PROCEED IN A NORTHERLY DIRECTION ALONG NORTH FORK OF FLAT ROCK MESA ROAD APPROXIMATELY 0.3 MILES TO THE INTERSECTION OF AN EXISTING ROAD TO THE EAST. EXIT RIGHT AND PROCEED IN AN EASTERLY DIRECTION ALONG EXISTING ROAD APPROXIMATELY 0.1 MILES TO THE PROPOSED ACCESS ROAD. FOLLOW ROAD FLAGS IN A SOUTHEASTERLY DIRECTION APPROXIMATELY 80 FEET TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 85.2 MILES IN A SOUTHERLY DIRECTION.

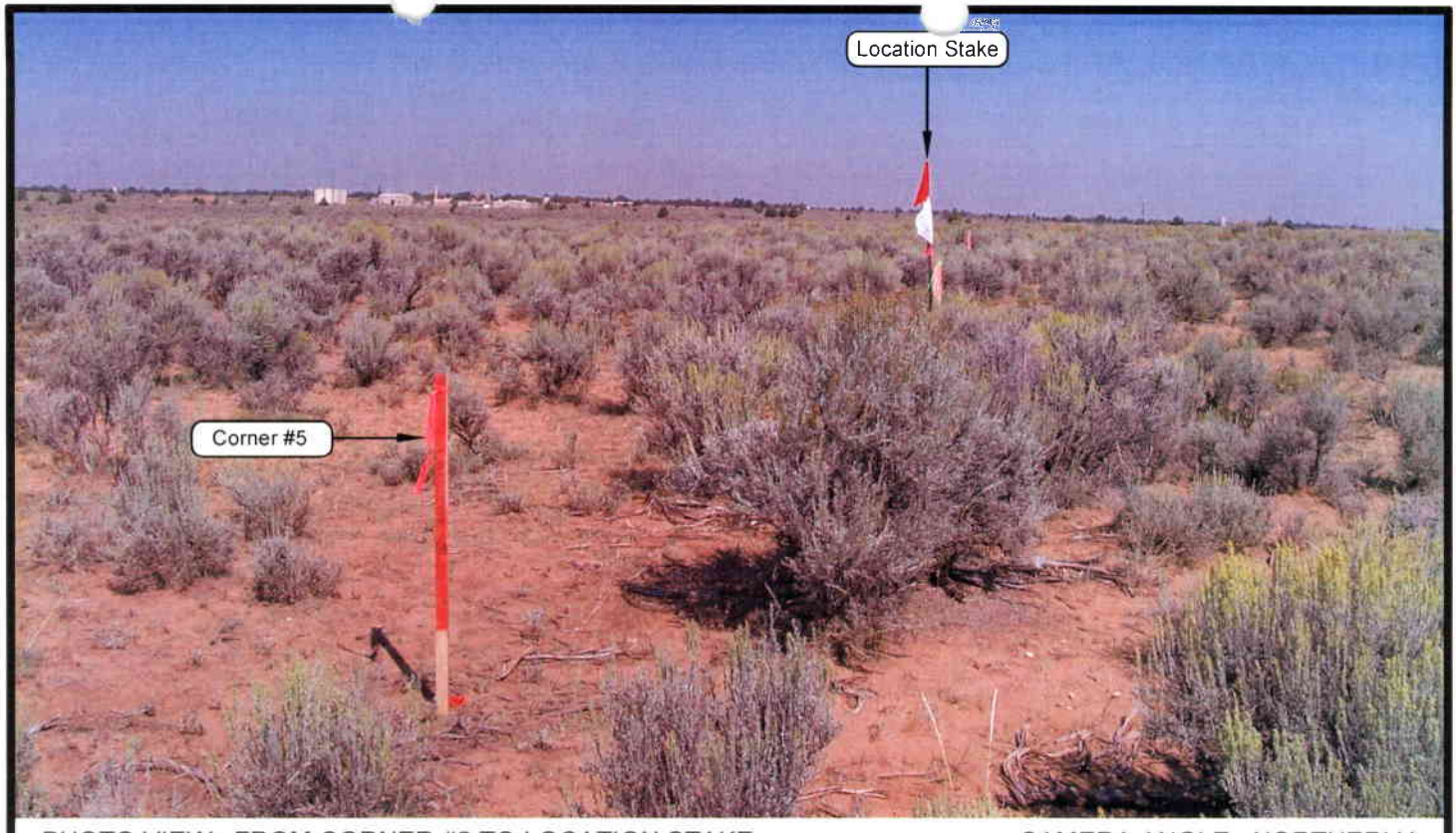


PHOTO VIEW: FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHERLY

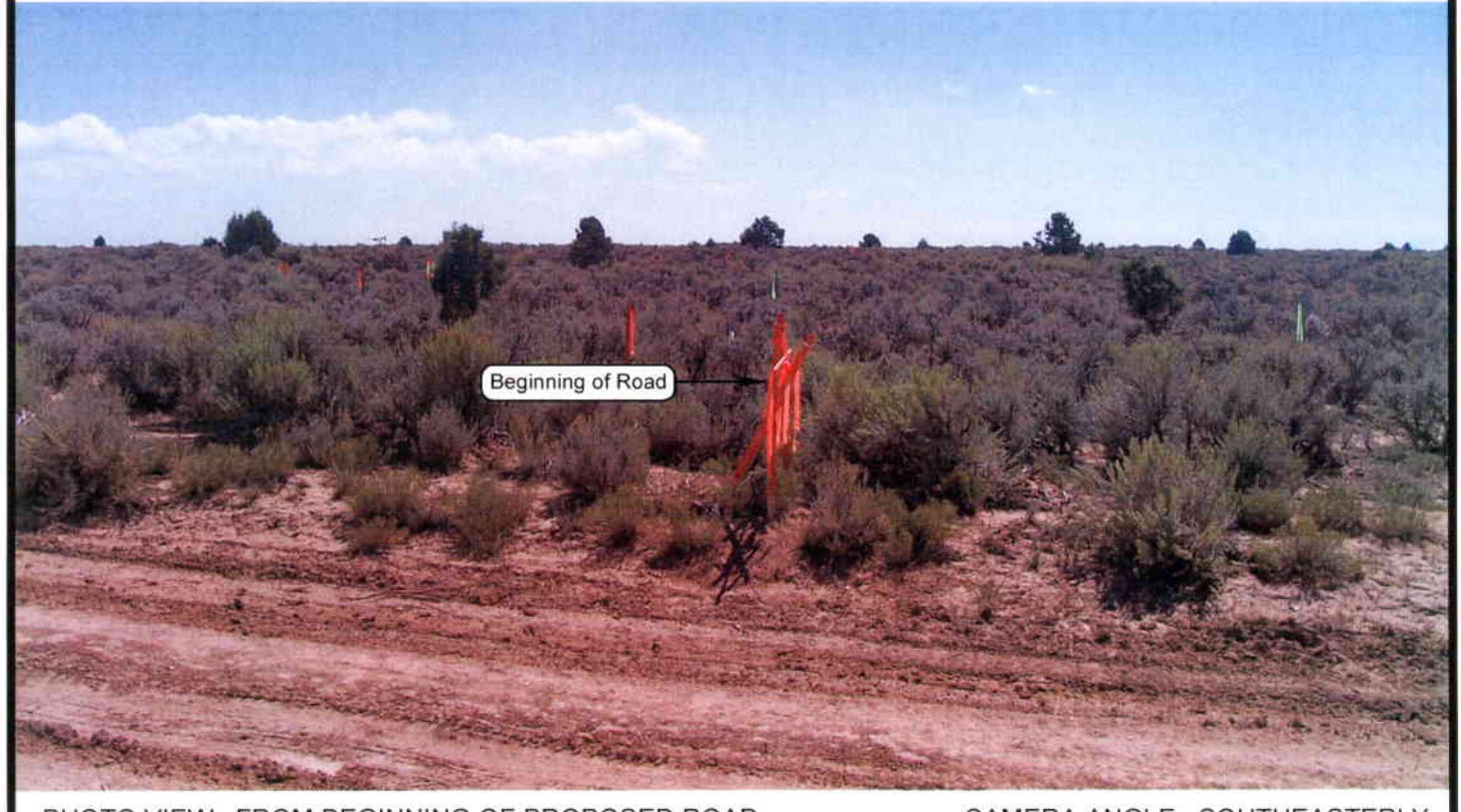


PHOTO VIEW: FROM BEGINNING OF PROPOSED ROAD

CAMERA ANGLE: SOUTHEASTERLY

MILLER, DYER & CO. LLC

Ute Tribal 3-32-14-20
SECTION 32, T14S, R20E, S.L.B.&M.
809' FNL & 1529' FWL

LOCATION PHOTOS		DATE TAKEN: 09-07-07
		DATE DRAWN: 09-26-07
TAKEN BY: B.J.S.	DRAWN BY: M.W.W.	REVISED:

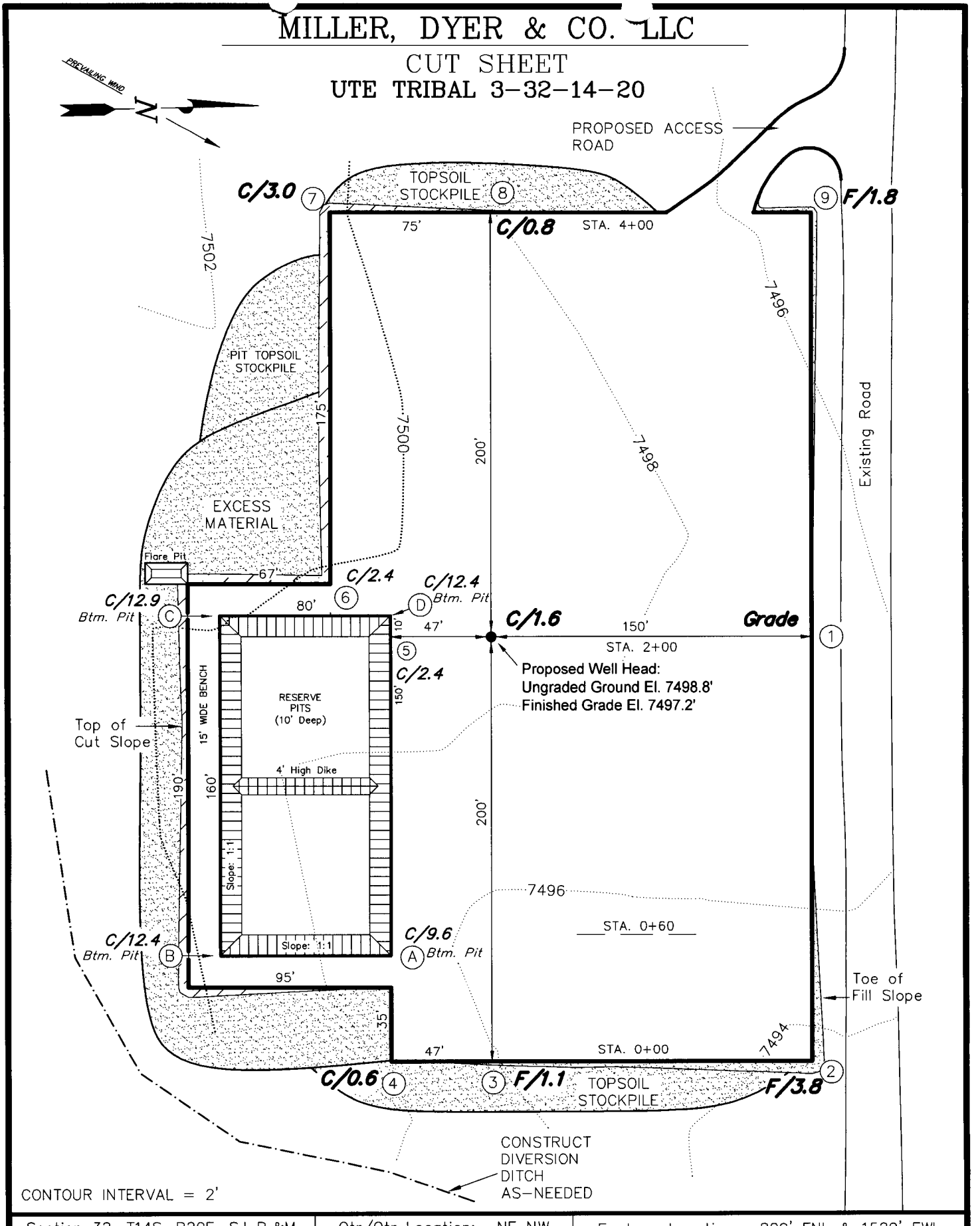
Timberline (435) 789-1365
Engineering & Land Surveying, Inc.
38 WEST 100 NORTH VERNAL, UTAH 84078

SHEET 1 OF 10

MILLER, DYER & CO. LLC

CUT SHEET

UTE TRIBAL 3-32-14-20

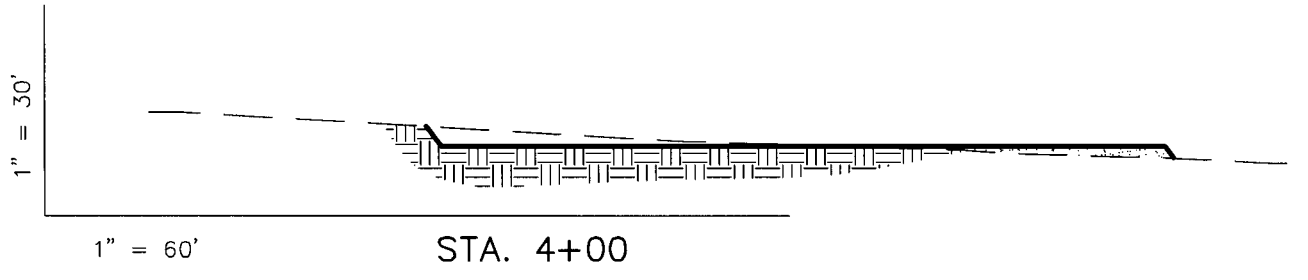


Section 32, T14S, R20E, S.L.B.&M.	Qtr/Qtr Location: NE NW		Footage Location: 809' FNL & 1529' FWL	
Date Surveyed: 09-07-07	Date Drawn: 09-25-07	Date Last Revision:	Timberline (435) 789-1365 Engineering & Land Surveying, Inc. 38 WEST 100 NORTH VERNAL, UTAH 84078	SHEET 3 OF 10
Surveyed By: B.J.S..	Drawn By: M.W.W.	Scale: 1" = 60'		

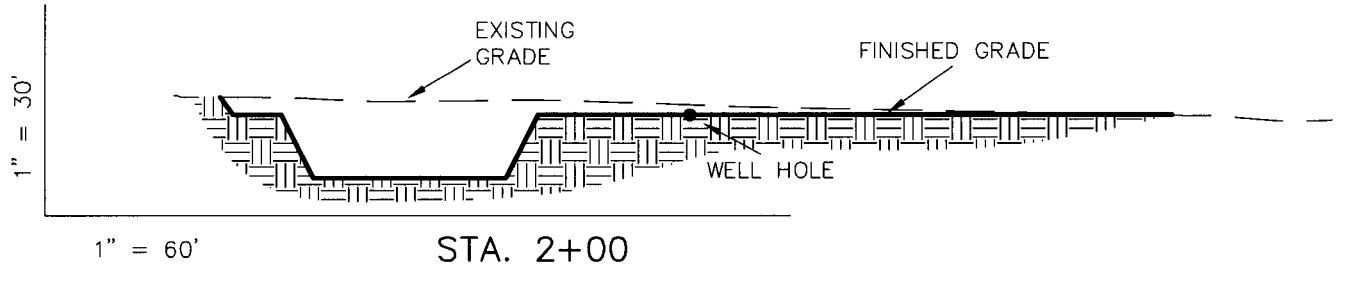
MILLER, DYER & CO. LLC

CROSS SECTIONS

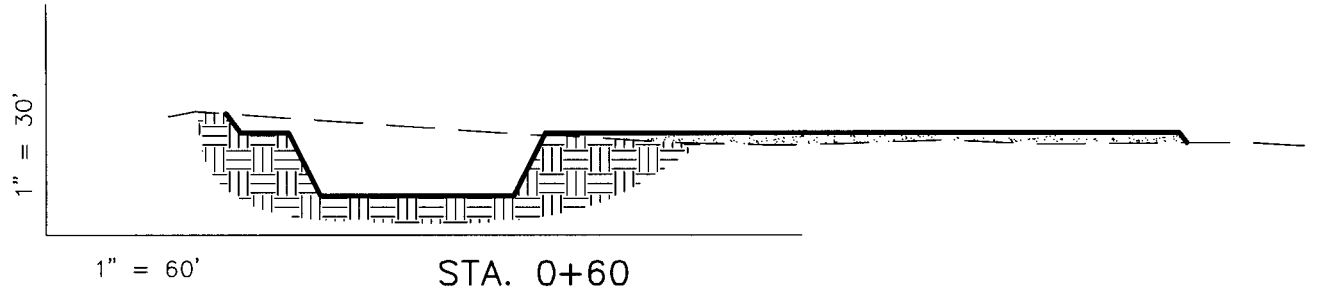
UTE TRIBAL 3-32-14-20



STA. 4+00

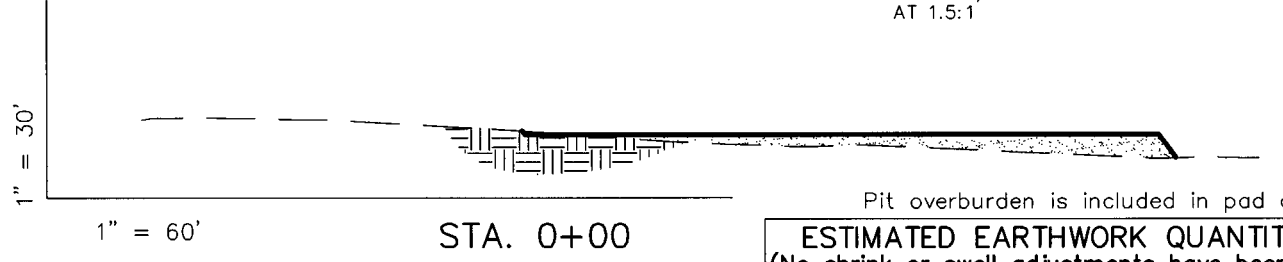


STA. 2+00



STA. 0+60

NOTE:
UNLESS OTHERWISE NOTED
ALL CUT/FILL SLOPES ARE
AT 1.5:1



STA. 0+00

REFERENCE POINTS

200' NORTHERLY = 7496.4'
250' NORTHERLY = 7495.5'
250' EASTERLY = 7497.0'
300' EASTERLY = 7496.6'

Pit overburden is included in pad cut.

ESTIMATED EARTHWORK QUANTITIES
(No shrink or swell adjustments have been used)
(Expressed in Cubic Yards)

ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	2,200	2,200	Topsoil is not included in Pad Cut	0
PIT	3,850	0		3,850
TOTALS	6,050	2,200	1,880	3,850

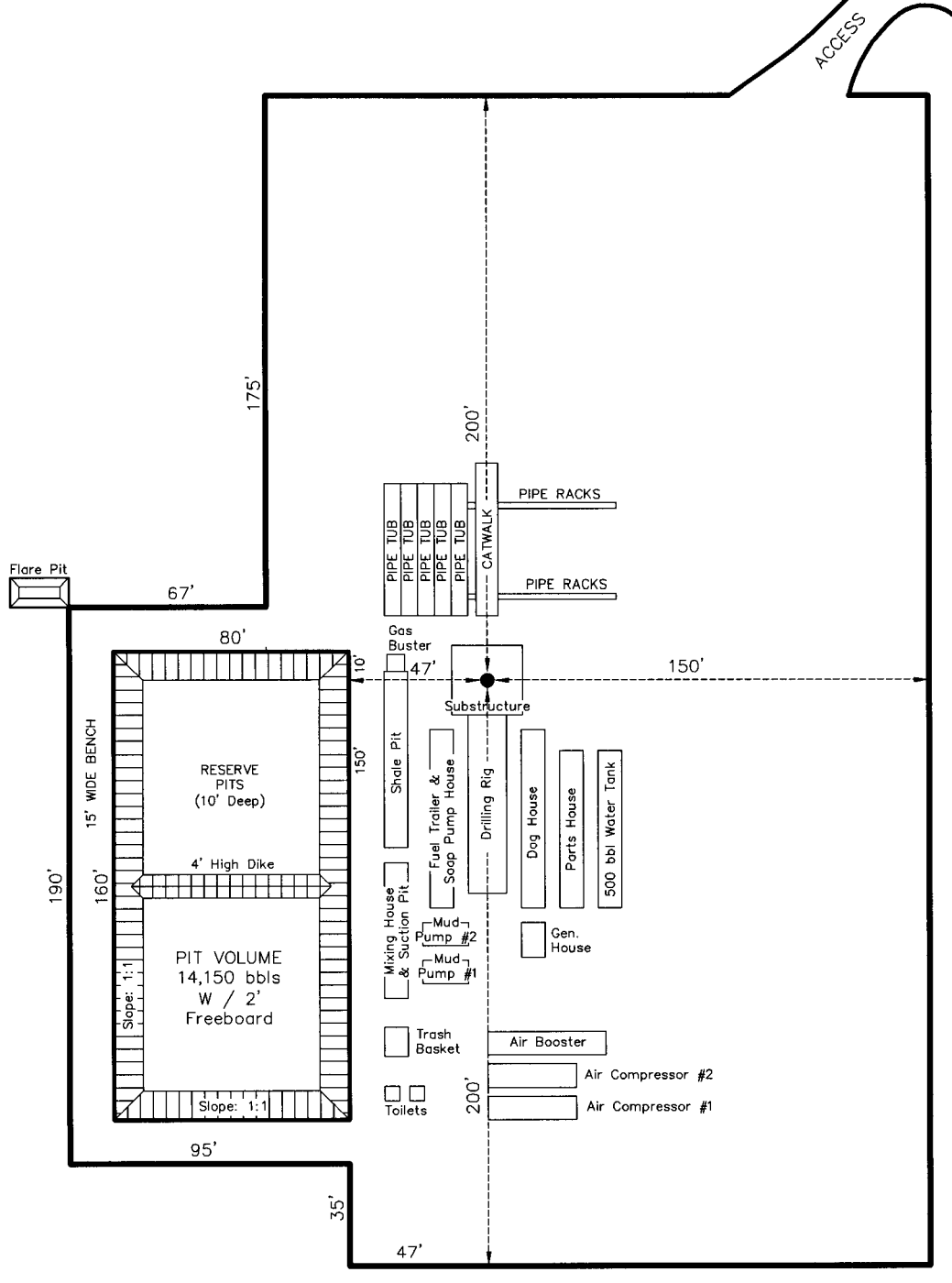
Excess Material after Pit Rehabilitation = 0 Cu. Yds.

Section 32, T14S, R20E, S.L.B.&M.	Qtr/Qtr Location: NE NW	Footage Location: 809' FNL & 1529' FWL	
Date Surveyed: 09-07-07	Date Drawn: 09-25-07	Date Last Revision:	
Surveyed By: B.J.S..	Drawn By: M.W.W.	Scale: 1" = 60'	

Timberline (435) 789-1365
Engineering & Land Surveying, Inc.
38 WEST 100 NORTH VERNAL, UTAH 84078

MILLER, DYER & CO. LLC

TYPICAL RIG LAYOUT
UTE TRIBAL 3-32-14-20



Section 32, T14S, R20E, S.L.B.&M.	Qtr/Qtr Location: NE NW	Footage Location: 809' FNL & 1529' FWL

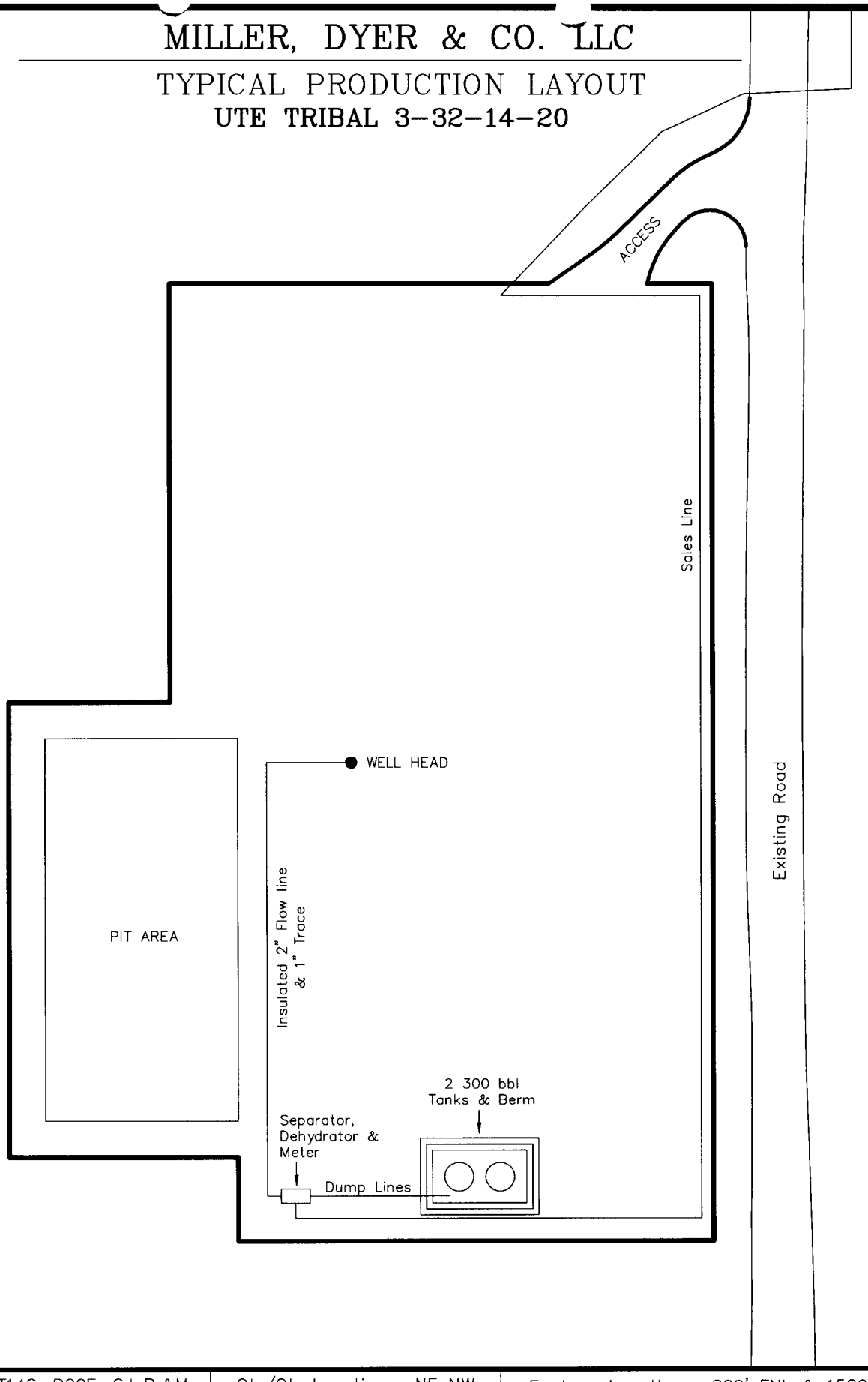
Date Surveyed: 09-07-07	Date Drawn: 09-25-07	Date Last Revision:
Surveyed By: B.J.S..	Drawn By: M.W.W.	Scale: 1" = 60'

Timberline (435) 789-1365
Engineering & Land Surveying, Inc.
38 WEST 100 NORTH VERNAL, UTAH 84078

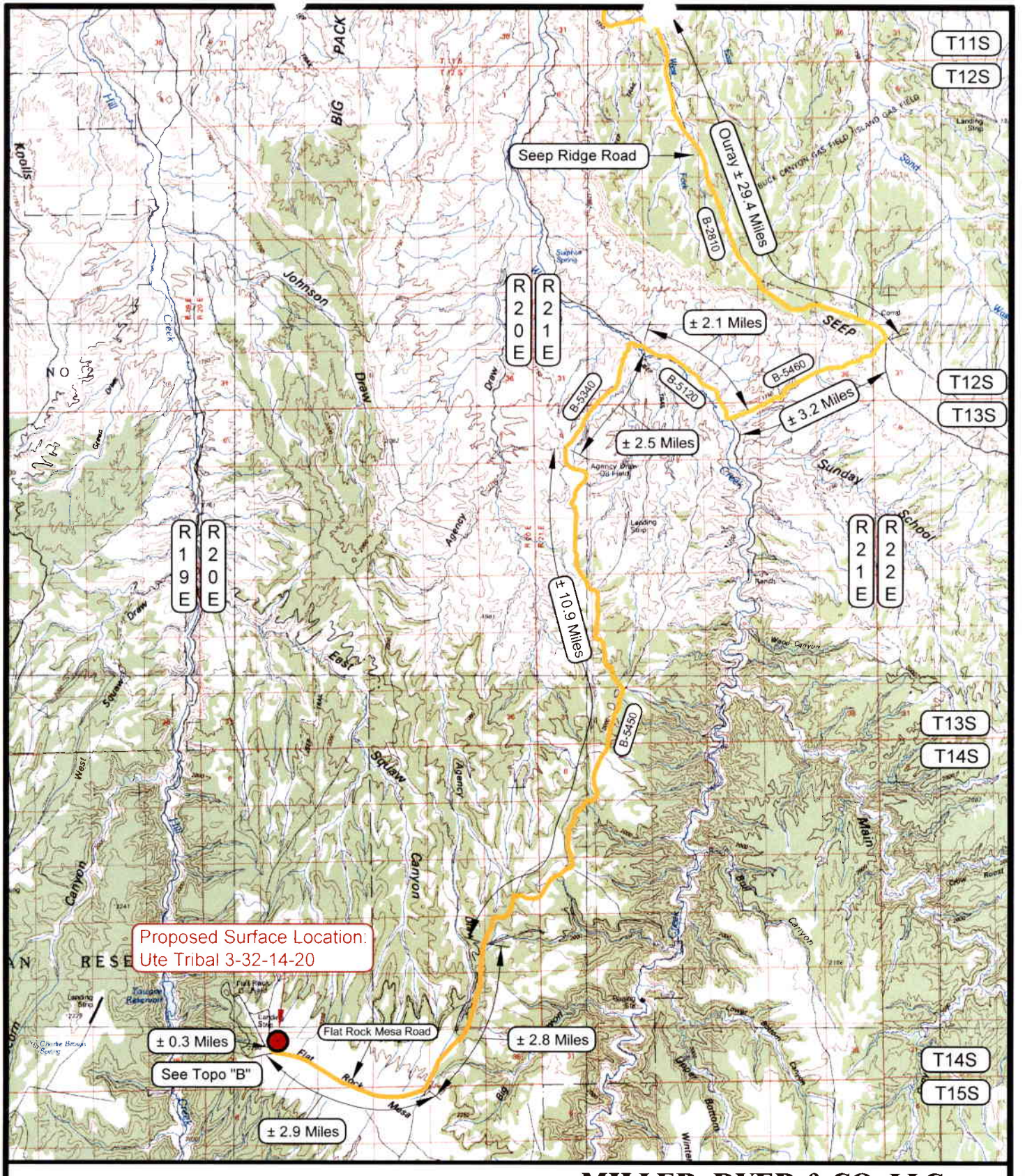
MILLER, DYER & CO. LLC

TYPICAL PRODUCTION LAYOUT

UTE TRIBAL 3-32-14-20



Section 32, T14S, R20E, S.L.B.&M.	Qtr/Qtr Location: NE NW		Footage Location: 809' FNL & 1529' FWL	
Date Surveyed: 09-07-07	Date Drawn: 09-25-07	Date Last Revision:	*Timberline* (435) 789-1365 *Engineering & Land Surveying, Inc.* 38 WEST 100 NORTH VERNAL, UTAH 84078	SHEET 6 OF 10
Surveyed By: B.J.S..	Drawn By: M.W.W.	Scale: 1" = 60'		



LEGEND

PROPOSED ACCESS ROAD
= SUBJECT WELL
= OTHER WELLS
= EXISTING ROAD
= EXISTING ROAD (TO BE IMPROVED)

B-5460 = COUNTY ROAD CLASS & NUMBER

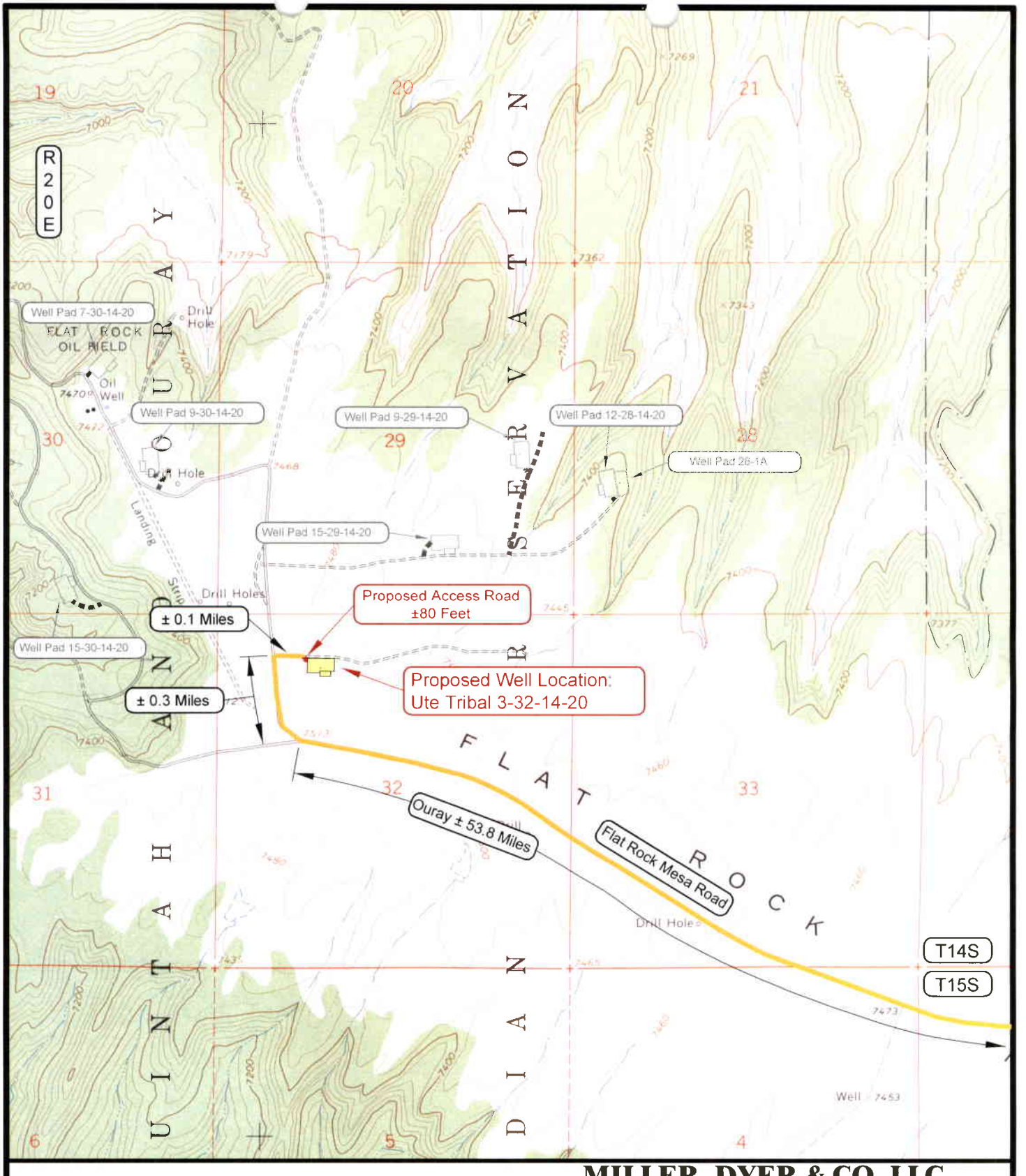
N

MILLER, DYER & CO. LLC

Ute Tribal 3-32-14-20
SECTION 32, T14S, R20E, S.L.B.&M.
809' FNL & 1529' FWL

TOPOGRAPHIC MAP "A"	DATE SURVEYED: 09-07-07
	DATE DRAWN: 09-26-07
SCALE: 1:150,000 DRAWN BY: M.W.W.	REVISED:

Timberline (435) 789-1365
Engineering & Land Surveying, Inc.
38 WEST 100 NORTH VERNAL, UTAH 84078



LEGEND

PROPOSED ACCESS ROAD
= SUBJECT WELL
= SHARED ACCESS
= EXISTING ROAD
= EXISTING ROAD (TO BE IMPROVED)
B-5460 = COUNTY ROAD CLASS & NUMBER
= LEASE LINE AND / OR PROPERTY LINE

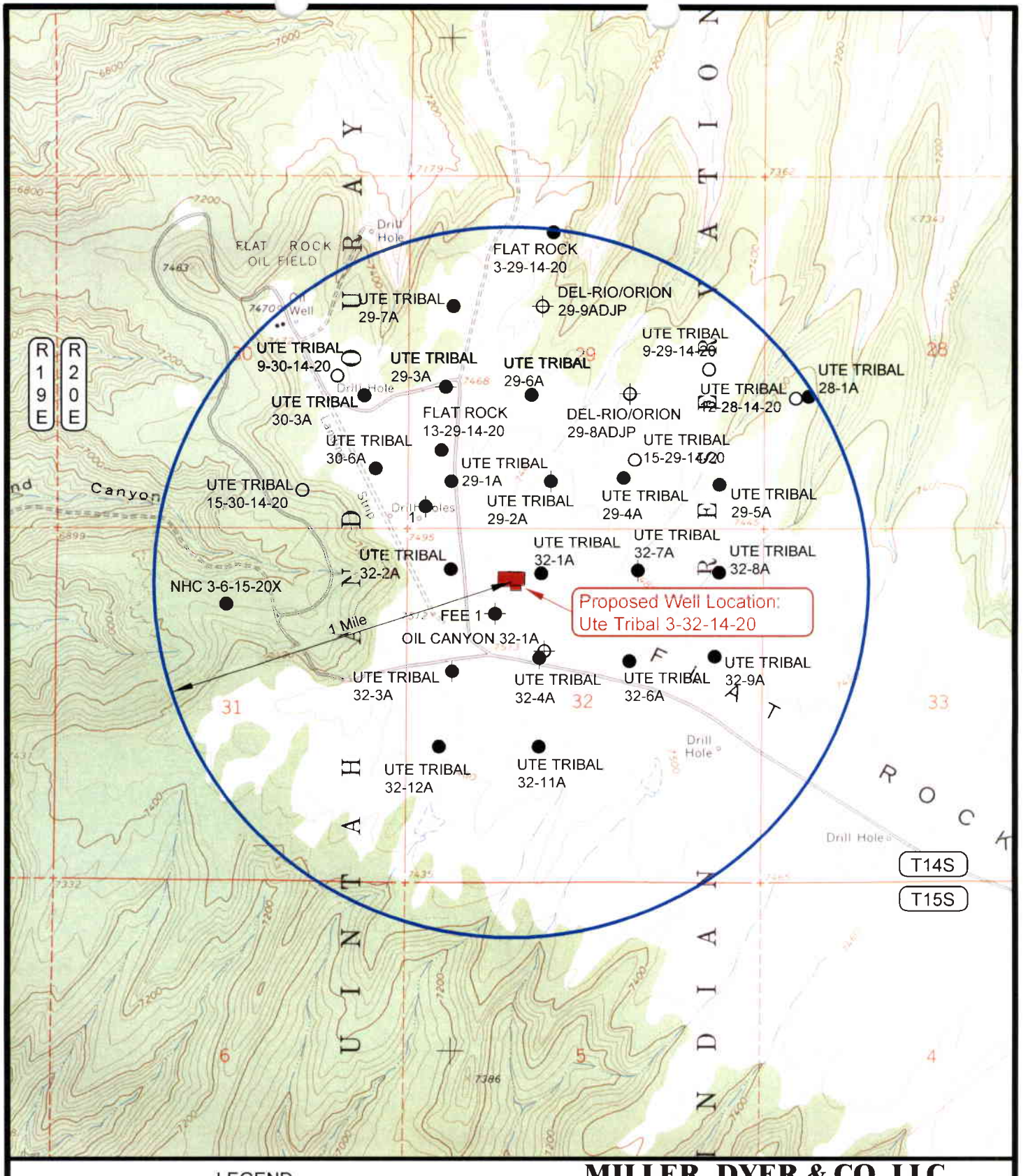
N

MILLER, DYER & CO. LLC

Ute Tribal 3-32-14-20
SECTION 32, T14S, R20E, S.L.B.&M.
809' FNL & 1529' FWL

TOPOGRAPHIC MAP "B"	DATE SURVEYED: 09-07-07
	DATE DRAWN: 09-26-07
SCALE: 1" = 2000' / DRAWN BY: M.W.W.	REVISED:

Timberline Engineering & Land Surveying, Inc.
(435) 789-1365
38 WEST 100 NORTH VERNAL, UTAH 84078



LEGEND

- = DISPOSAL WELL
- = PRODUCING WELL
- = SHUT IN WELL
- = PROPOSED WELL
- = WATER WELL
- = ABANDONED WELL
- = TEMPORARILY ABANDONED WELL
- = ABANDONED LOCATION

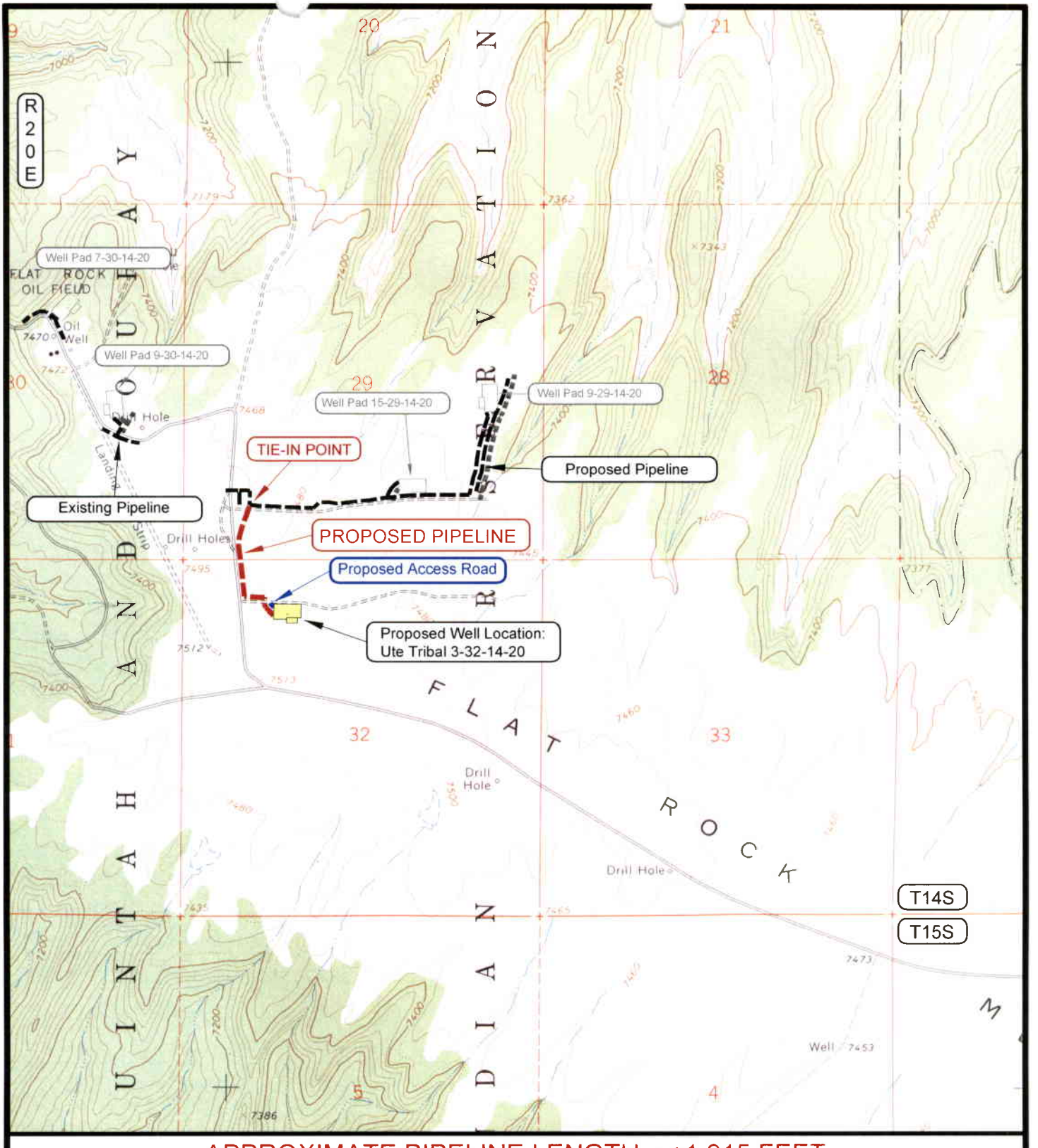
N

MILLER, DYER & CO. LLC

Ute Tribal 3-32-14-20
SECTION 32, T14S, R20E, S.L.B.&M.
809' FNL & 1529' FWL

TOPOGRAPHIC MAP "C"	DATE SURVEYED: 09-06-07
	DATE DRAWN: 09-24-07
SCALE: 1" = 2000' / DRAWN BY: M.W.W.	REVISED:

Timberline Engineering & Land Surveying, Inc.
(435) 789-1365
38 WEST 100 NORTH VERNAL, UTAH 84078



APPROXIMATE PIPELINE LENGTH = ±1,915 FEET

LEGEND

= PROPOSED PIPELINE
= OTHER PIPELINE
PROPOSED ACCESS ROAD
= SUBJECT WELL
= OTHER WELLS
= LEASE LINE AND / OR PROPERTY LINE

N

MILLER, DYER & CO. LLC

Ute Tribal 3-32-14-20
SECTION 32, T14S, R20E, S.L.B.&M.
809' FNL & 1529' FWL

TOPOGRAPHIC MAP "D"		DATE SURVEYED: 09-07-07
		DATE DRAWN: 09-26-07
SCALE: 1" = 2000'	DRAWN BY: M.W.W.	REVISED:

Timberline (435) 789-1365
Engineering & Land Surveying, Inc.
38 WEST 100 NORTH VERNAL, UTAH 84078

WORKSHEET

APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 10/29/2007

API NO. ASSIGNED: 43-047-39741

WELL NAME: UTE TRIBAL 3-32-14-20

OPERATOR: MILLER, DYER & CO, LLC (N2580)

PHONE NUMBER: 303-292-0949

CONTACT: JEFF LANG

PROPOSED LOCATION:

NENW 32 140S 200E

SURFACE: 0809 FNL 1529 FWL

BOTTOM: 0809 FNL 1529 FWL

COUNTY: UINTAH

LATITUDE: 39.56084 LONGITUDE: -109.7053

UTM SURF EASTINGS: 611226 NORTHINGS: 4379608

FIELD NAME: FLAT ROCK (600)

INSPECT LOCATN BY: / /		
Tech Review	**Initials**	**Date**
Engineering	DKD	11/21/07
Geology		
Surface		

LEASE TYPE: 3 - State

LEASE NUMBER: ML-44317

SURFACE OWNER: 2 - Indian

PROPOSED FORMATION: WINGT

COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

✓ Plat

✓ Bond: Fed[] Ind[] Sta[] Fee[]
(No. RLB0008085)

N Potash (Y/N)

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

✓ Water Permit
(No. UTE)

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

N/A Fee Surf Agreement (Y/N)

N/A 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: _____

Eff Date: _____

Siting: _____

___ R649-3-11. Directional Drill

COMMENTS: _____

STIPULATIONS:

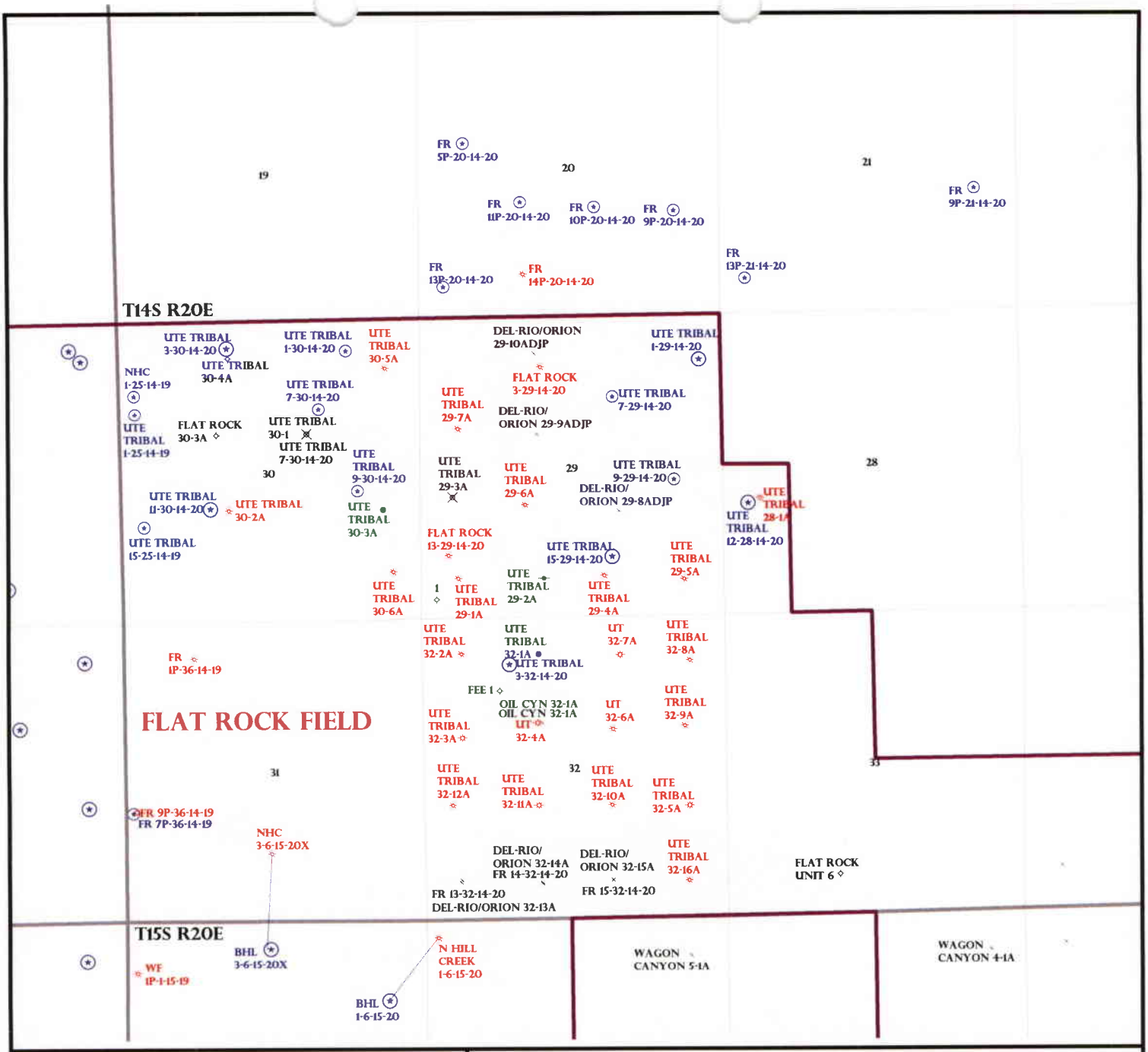
1- Federal Approval

2- Spacing Stip

3- Surface Csg Cmt stip

4- THIS WELL CAN NOT BE COMPLETED IN THE INTERVAL EQUIVALENT TO THE PRODUCING ZONE IN THE UTE TRIBAL 32-1A WELL.

5- STATEMENT OF BASIS



OPERATOR: MILLER, DYER & CO (N2580)

SEC: 29,30,32 T.14S R. 20E

FIELD: FLAT ROCK (600)

COUNTY: UINTAH

SPACING: R649-3-3 / EXCEPTION LOCATION

Field Status
- ABANDONED
- ACTIVE
- COMBINED
- INACTIVE
- PROPOSED
- STORAGE
- TERMINATED

Unit Status
- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PENDING
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

Wells Status
- GAS INJECTION
- GAS STORAGE
- LOCATION ABANDONED
- NEW LOCATION
- PLUGGED & ABANDONED
- PRODUCING GAS
- PRODUCING OIL
- SHUT-IN GAS
- SHUT-IN OIL
- TEMP. ABANDONED
- TEST WELL
- WATER INJECTION
- WATER SUPPLY
- WATER DISPOSAL
- DRILLING

UTAH DNR
OIL, GAS & MINING

N
W E
S

PREPARED BY: DIANA MASON
DATE: 30-OCTOBERR-2007

Application for Permit to Drill
Statement of Basis

APD No	API WellNo	Status	Well Type	Surf Ownr	CBM
618	43-047-39741-00-00		GW	I	No

Operator MILLER, DYER & CO, LLC **Surface Owner-APD**
Well Name UTE TRIBAL 3-32-14-20 **Unit**
Field FLAT ROCK **Type of Work**
Location NENW 32 14S 20E S 809 FNL 1529 FWL GPS Coord (UTM) 611226E 4379608N

Geologic Statement of Basis

Miller, Dyer & Co. proposes to set 40 feet of conductor pipe and 3,300 feet of surface casing, both cemented to the surface. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the center of Section 32. The base of the moderately saline water is estimated at 3,500 feet. The surface formation at the proposed location is the Green River Formation. The Green River Formation is made up of interbedded sandstones, limestones and shales. Fresh water can be expected to be found in the upper Green River. The proposed casing and cementing program should adequately protect any useable aquifers.

Brad Hill	11/29/2007
APD Evaluator	**Date / Time**

Surface Statement of Basis

The Ute Indian Tribe is the surface owner at this location. The operator is responsible for obtaining any needed permits or rights of way before causing any surface disturbance or drilling.

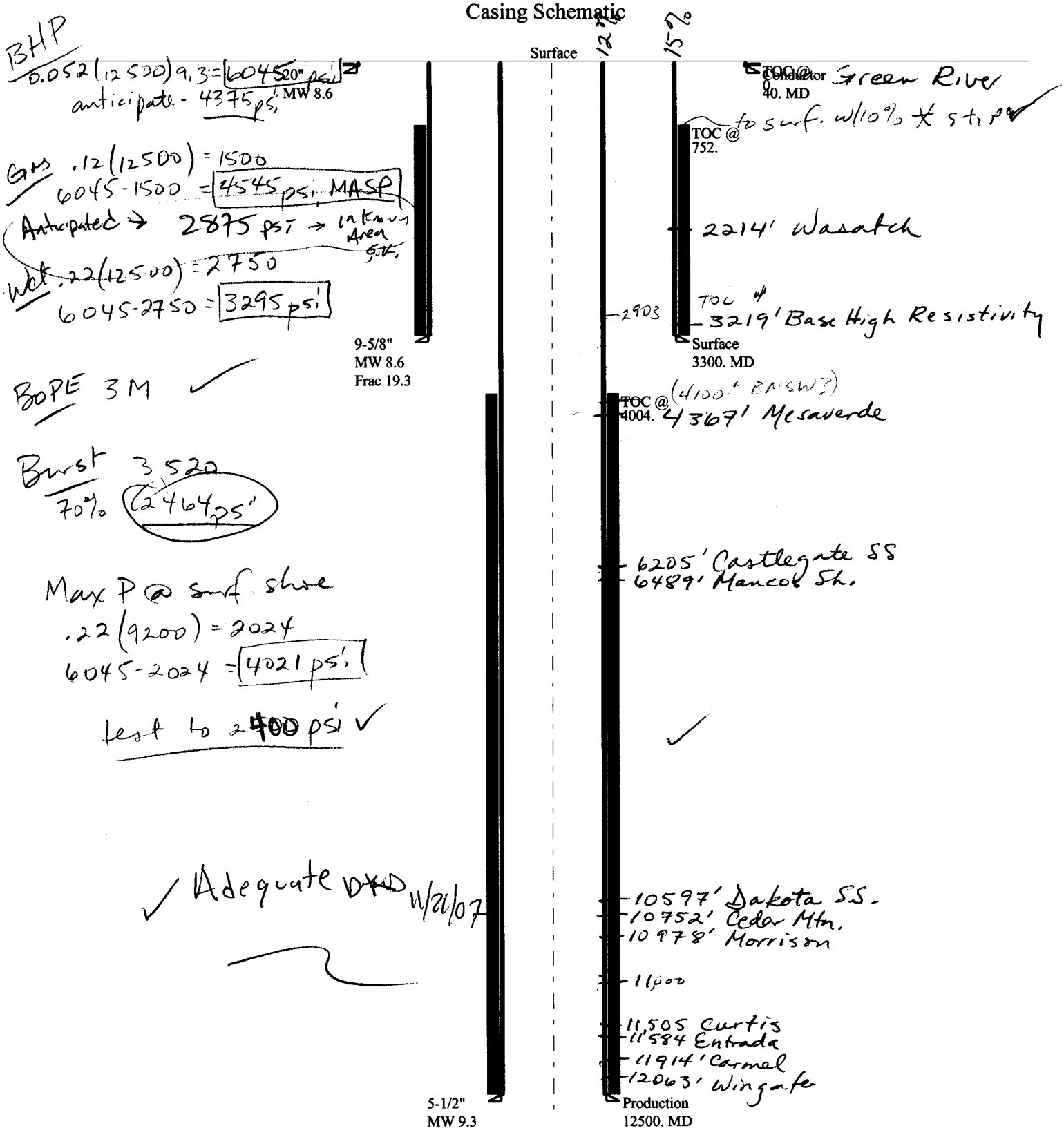
Onsite Evaluator	**Date / Time**

Conditions of Approval / Application for Permit to Drill

Category	Condition
	None.

2007-11 Miller Dyer Ute Tribal 3-32-14-20

Casing Schematic



Well name:	**2007-11 Miller Dyer Ute Tribal 3-32-14-20**
Operator:	**Miller, Dyer & Co., LLC**
String type:	Surface
Project ID:	43-047-39741
Location:	Uintah County

Design parameters:

Collapse
Mud weight: 8.600 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 2,574 psi
Internal gradient: 0.220 psi/ft
Calculated BHP 3,300 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 buoyed weight.
Neutral point: 2,880 ft

Environment:
H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 121 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 300 ft

Cement top: 752 ft

Non-directional string.

Re subsequent strings:
Next setting depth: 12,500 ft
Next mud weight: 9.300 ppg
Next setting BHP: 6,039 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 3,300 ft
Injection pressure: 3,300 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	3300	9.625	36.00	J-55	ST&C	3300	3300	8.796	1432.4

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	1474	2020	1.370	3300	3520	1.07	104	394	3.80 J

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Minerals
Phone: 801-538-5357
FAX: 801-359-3940
Date: November 15,2007
Salt Lake City, Utah

Remarks:
Collapse is based on a vertical depth of 3300 ft, a mud weight of 8.6 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

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

Well name:	**2007-11 Miller Dyer Ute Tribal 3-32-14-20**
Operator:	**Miller, Dyer & Co., LLC**
String type:	Production
Project ID:	43-047-39741
Location:	Uintah County

Design parameters:

Collapse
Mud weight: 9.300 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 3,289 psi
Internal gradient: 0.220 psi/ft
Calculated BHP 6,039 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 buoyed weight.
Neutral point: 10,737 ft

Environment:
H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 250 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 1,500 ft

Cement top: 4,004 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)
3	1200	5.5	17.00	N-80	Buttress	1200	1200	4.767	156.6
2	9800	5.5	17.00	N-80	LT&C	11000	11000	4.767	1279.2
1	1500	5.5	17.00	P-110	LT&C	12500	12500	4.767	195.8

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
3	580	5353	9.233	3553	7740	2.18	183	397	2.17 B
2	5314	6290	1.184	5709	7740	1.36	162	348	2.15 J
1	6039	7480	1.239	6039	10640	1.76	-4	445	-99.54 J

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Minerals
Phone: 801-538-5357
FAX: 801-359-3940
Date: November 15,2007
Salt Lake City, Utah

Remarks:
Collapse is based on a vertical depth of 12500 ft, a mud weight of 9.3 ppg The casing is considered to be evacuated for collapse purposes.
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

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

Well name:	**2007-11 Miller Dyer Ute Tribal 3-32-14-20**
Operator:	**Miller, Dyer & Co., LLC**
String type:	Conductor
Project ID:	43-047-39741
Location:	Uintah County

Design parameters:

Collapse
Mud weight: 8.600 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 13 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 18 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 buoyed weight.
Neutral point: 35 ft

Environment:
H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 76 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 300 ft

Cement top: 1 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	40	20	94.00	H-40	ST&C	40	40	18.999	79.8

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	18	520	29.099	18	1530	85.62	3	581	99.99 J

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Minerals
Phone: 801-538-5357
FAX: 801-359-3940
Date: November 15,2007
Salt Lake City, Utah

Remarks:
Collapse is based on a vertical depth of 40 ft, a mud weight of 8.6 ppg The casing is considered to be evacuated for collapse purposes.
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

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

MILLER
DYER & CO. LLC

475 Seventeenth Street, Suite 1200
Denver, Colorado 80202
P: 303-292-0949
F: 303-292-3901

October 22, 2007

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

RE: Exception Location to Drill
Ute Tribal 3-32-14-20
Section 32, T14S R20E
ML-44317
Uintah County, Utah

Dear Ms Mason:

Miller, Dyer & Co. LLC, as Operator, is proposing to drill and has made application with the Division of Oil, Gas and Mining ("DOGM") for a permit to drill the following well:

Ute Tribal 3-32-14-20
Location: 809' FNL, 1529' FWL, (NENW) Section 32, T14S R20E, Uintah County, Utah Lease: U-44317;
Record Title Owner – Chicago Energy Associates, LLC
Designated Operator: Miller, Dyer & Co. LLC (Designation on file with DOGM & SITLA)

Pursuant to Rule R649-3-3, Miller, Dyer & Co. LLC is making application and seeking DOGM's administrative authority to grant an exception to the locating and siting requirements for this well.

The Flat Rock #3-32-14-20 well is approximately 251' West of the 200' drilling tolerance from the center of the 40-acre drilling unit designated as the NENW of Section 32. The present location of this well as surveyed and staked allows optimal access to the Entrada Formation as observed by our seismic survey.

Chicago Energy Associates, LLC is the owner within a 460-foot radius of the proposed well location and is the owner of the directly offsetting drilling unit being crowded by the proposed well location.

Miller-Dyer and Chicago Energy Associates, LLC respectfully requests an administrative approval by the division of an exception location for the well referenced above.

Yours truly,
MILLER, DYER & CO. LLC

Jeffrey H. Lang
Vice President of Operations

RECEIVED
OCT 29 2007
DIV. OF OIL, GAS & MINING

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

November 21, 2007

Miller, Dyer & Co., LLC
475 17th St., Ste. 1200
Denver, CO 80202

Re: Ute Tribal 3-32-14-20 Well, 809' FNL, 1529' FWL, NE NW, Sec. 32, T. 14 South, R. 20 East, Uintah 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.

Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby 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 43-047-39741.

Sincerely,

Gil Hunt
Associate Director

pab
Enclosures

cc: Uintah County Assessor
Bureau of Land Management Vernal Office
SITLA

Operator: Miller, Dyer & Co., LLC

Well Name & Number Ute Tribal 3-32-14-20

API Number: 43-047-39741

Lease: ML-44317

Location: NE NW **Sec.** 32 **T.** 14 South **R.** 20 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) 942-0873 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.

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. This well cannot be completed in the interval equivalent to the producing zone in the Ute Tribal 32-1A

7. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.

8. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

9. Surface casing shall be cemented to the surface.

Division of Oil, Gas and Mining

OPERATOR CHANGE WORKSHEET

ROUTING
1. DJJ
2. CDW

X - Change of Operator (Well Sold) Operator Name Change/Merger

The operator of the well(s) listed below has changed, effective: **6/1/2008**

FROM: (Old Operator):	**TO:** (New Operator):
N2580-Miller, Dyer & Co, LLC	N2680-Whiting Oil & Gas Company
475 17th St, Suite 1200	1700 Broadway, Suite 2300
Denver, CO 80202	Denver, CO 80290
Phone: 1 (303) 292-0949	Phone: 1 (303) 837-1661

CA No. **Unit:**

WELL NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
SEE ATTACHED LIST								

OPERATOR CHANGES DOCUMENTATION

Enter date after each listed item is completed

1. (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 6/5/2008
2. (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 6/5/2008
3. The new company was checked on the **Department of Commerce, Division of Corporations Database on:** 7/16/2008
4a. Is the new operator registered in the State of Utah: _____ Business Number: 5890476-0143
4b. If **NO**, the operator was contacted contacted on:
5a. (R649-9-2)Waste Management Plan has been received on: REQUESTED 7/16/2008
5b. Inspections of LA PA state/fee well sites complete on: done
5c. Reports current for Production/Disposition & Sundries on: ok
6. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM not yet BIA not yet
7. **Federal and Indian Units:**
   The BLM or BIA has approved the successor of unit operator for wells listed on: n/a
8. **Federal and Indian Communization Agreements ("CA"):**
   The BLM or BIA has approved the operator for all wells listed within a CA on: n/a
9. **Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject,** for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: n/a

DATA ENTRY:

1. Changes entered in the **Oil and Gas Database on:** 7/16/2008
2. Changes have been entered on the **Monthly Operator Change Spread Sheet on:** 7/16/2008
3. Bond information entered in RBDMS on: 7/16/2008
4. Fee/State wells attached to bond in RBDMS on: 7/16/2008
5. Injection Projects to new operator in RBDMS on: n/a
6. Receipt of Acceptance of Drilling Procedures for APD/New on: 7/16/2008

BOND VERIFICATION:

1. Federal well(s) covered by Bond Number: UTB000148
2. Indian well(s) covered by Bond Number: RLB0011681
3a. (R649-3-1) The **NEW** operator of any state/fee well(s) listed covered by Bond Number RLB0004585
3b. The **FORMER** operator has requested a release of liability from their bond on: not yet

LEASE INTEREST OWNER NOTIFICATION:

4. (R649-2-10) The **NEW** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: n/a

COMMENTS:

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

Request to Transfer Application or Permit to Drill

(This form should accompany a Sundry Notice, Form 9, requesting APD transfer)

Well name:	UTE TRIBAL 3-32-14-20
API number:	4304739741
Location:	Qtr-Qtr: NENW Section: 32 Township: 14S Range: 20E
Company that filed original application:	MILLER, DYER & CO., LLC
Date original permit was issued:	11/21/2007
Company that permit was issued to:	MILLER, DYER & CO., LLC

Check one	Desired Action:
	Transfer pending (unapproved) Application for Permit to Drill to new operator
	The undersigned as owner with legal rights to drill on the property, hereby verifies that the information as submitted in the pending Application for Permit to Drill, remains valid and does not require revision. The new owner of the application accepts and agrees to the information and procedures as stated in the application.
✓	**Transfer approved Application for Permit to Drill to new operator**
	The undersigned as owner with legal rights to drill on the property as permitted, 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.	Yes	No
If located on private land, has the ownership changed?		✓
If so, has the surface agreement been updated?		
Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?		✓
Have there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?		✓
Have there been any changes to the access route including ownership or right-of-way, which could affect the proposed location?		✓
Has the approved source of water for drilling changed?		✓
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?		✓
Is bonding still in place, which covers this proposed well? Bond No. RLB0011676	✓	

Any desired or necessary changes to either a pending or approved Application for Permit to Drill that is being transferred, should be filed on a Sundry Notice, Form 9, or amended Application for Permit to Drill, Form 3, as appropriate, with necessary supporting information as required.

Name (please print) Ricle Ross Title UT Operations

Signature [signature] Date 6/1/08

Representing (company name) WHITING OIL AND GAS CORPORATION

The person signing this form must have legal authority to represent the company or individual(s) to be listed as the new operator on the Application for Permit to Drill.

(3/2004)

RECEIVED
JUN 02 2008
DIV. OF OIL, GAS & MINING

FORM 9

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

5. LEASE DESIGNATION AND SERIAL NUMBER: See Attached List

SUNDRY NOTICES AND REPORTS ON WELLS

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

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.

7. UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☐ OTHER _____

8. WELL NAME and NUMBER: See Attached List

2. NAME OF OPERATOR: Whiting Oil And Gas Company N2680

9. API NUMBER:

3. ADDRESS OF OPERATOR: 1700 Broadway, Ste 2300 CITY Denver STATE CO ZIP 80290

PHONE NUMBER: (303) 837-1661

10. FIELD AND POOL, OR WILDCAT:

4. LOCATION OF WELL

FOOTAGES AT SURFACE:

COUNTY:

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:

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: _____	☐ 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.

Effective 6/1/2008, please change the Operator of record from Miller, Dyer & Co., LLC to Whiting Oil and Gas Corporation. Whiting Oil and Gas Corporation Utah State bond is ~~#RLB0011676~~ RLB0004585 or Utah BLM Bond #UTB-000148 BIA RLB0011681.
See attached well list.

Whiting Oil and Gas Corporation
1700 Broadway, Suite 2300
Denver, CO 80290
(303) 837-1661

Miller, Dyer & Co., LLC
475 17th Street, Suite 1200
Denver, CO 80202
N2580

RECEIVED
JUN 05 2008
DIV. OF OIL, GAS & MINING

Miller, Dyer & Co., LLC

NAME (PLEASE PRINT) Jeffrey H. Lang TITLE VP Operations

SIGNATURE _____ DATE 6/3/08

Whiting Oil and Gas Corporation

NAME (PLEASE PRINT) Rick Ross TITLE VP Operations

SIGNATURE _____ DATE 6/3/08

(This space for State use only)

APPROVED 7/16/2008

Earlene Russell

Division of Oil, Gas and Mining
Earlene Russell, Engineering Technician

well_name	sec	twp	rng	api	entity	lease	well	stat 2	flag
UTE TRIBAL 32-5A	32	140S	200E	4304710577	12655	State	GW	S	
UTE TRIBAL 30-3A	30	140S	200E	4304710913	12395	Federal	OW	P	
UTE TRIBAL 30-5A	30	140S	200E	4304720502	12654	Federal	GW	S	
UTE TRIBAL 30-2A	30	140S	200E	4304730641	8112	Federal	GW	P	
UTE TRIBAL 29-1A	29	140S	200E	4304730981	8118	Federal	GW	P	
UTE TRIBAL 32-1A	32	140S	200E	4304732758	12064	State	OW	P	
UTE TRIBAL 29-2A	29	140S	200E	4304732945	8118	Federal	OW	P	
UTE TRIBAL 32-2A	32	140S	200E	4304733333	12658	State	GW	P	
UTE TRIBAL 32-3A	32	140S	200E	4304733334	12657	State	GW	S	
UTE TRIBAL 32-4A	32	140S	200E	4304733335	12656	State	GW	P	
UTE TRIBAL 32-6A	32	140S	200E	4304733337	12662	State	GW	P	
CHIMNEY ROCK 32-11	32	130S	210E	4304733445	12984	State	GW	S	
CHIMNEY ROCK 32-13	32	130S	210E	4304733447	12985	State	GW	P	
CHIMNEY ROCK 32-14	32	130S	210E	4304733448	12983	State	GW	P	
UTE TRIBAL 32-8A	32	140S	200E	4304733557	13066	State	GW	P	
UTE TRIBAL 32-12A	32	140S	200E	4304733558	13064	State	GW	P	
UTE TRIBAL 28-1A	28	140S	200E	4304733595	13059	Federal	GW	S	
UTE TRIBAL 30-6A	30	140S	200E	4304733596	13062	Federal	GW	P	
UTE TRIBAL 29-4A	29	140S	200E	4304733616	13060	Federal	GW	P	
UTE TRIBAL 29-5A	29	140S	200E	4304733617	13061	Federal	GW	P	
UTE TRIBAL 32-7A	32	140S	200E	4304733618	13065	State	GW	S	
UTE TRIBAL 32-9A	32	140S	200E	4304733619	13067	State	GW	P	
UTE TRIBAL 32-10A	32	140S	200E	4304733620	13054	State	GW	P	
UTE TRIBAL 32-11A	32	140S	200E	4304733621	13058	State	GW	S	
UTE TRIBAL 32-16A	32	140S	200E	4304734098	13449	State	GW	P	
UTE TRIBAL 29-6A	29	140S	200E	4304734102	13443	Federal	GW	P	
UTE TRIBAL 29-7A	29	140S	200E	4304734103	13444	Federal	GW	P	
UTE TRIBAL 10-2-15-20	02	150S	200E	4304735625	14167	State	GW	P	
FLAT ROCK 13-29-14-20	29	140S	200E	4304736778	15065	Federal	GW	P	
FLAT ROCK 3-29-14-20	29	140S	200E	4304736795	15099	Federal	GW	P	
UTE TRIBAL 6-16-14-20	16	140S	200E	4304738506	16320	State	GW	P	
UTE TRIBAL 15-25-14-19	30	140S	200E	4304739052	16169	Indian	GW	P	C
UTE TRIBAL 1-25-14-19	30	140S	200E	4304739053		Indian	GW	APD	
UTE TRIBAL 1-30-14-20	30	140S	200E	4304739665		Federal	GW	APD	
UTE TRIBAL 9-30-14-20	30	140S	200E	4304739666		Federal	GW	APD	
UTE TRIBAL 7-30-14-20	30	140S	200E	4304739667		Federal	GW	APD	
UTE TRIBAL 7-29-14-20	29	140S	200E	4304739668		Federal	GW	APD	
UTE TRIBAL 9-29-14-20	29	140S	200E	4304739669		Federal	GW	APD	
UTE TRIBAL 12-28-14-20	28	140S	200E	4304739736		Federal	GW	APD	
UTE TRIBAL 1-29-14-20	29	140S	200E	4304739737		Federal	GW	APD	
UTE TRIBAL 15-29-14-20	29	140S	200E	4304739738		Federal	GW	APD	
UTE TRIBAL 3-30-14-20	30	140S	200E	4304739739		Federal	GW	APD	
UTE TRIBAL 11-30-14-20	30	140S	200E	4304739740		Federal	GW	APD	
UTE TRIBAL 3-32-14-20	32	140S	200E	4304739741		State	GW	APD	
UTE TRIBAL 15-30-14-20	30	140S	200E	4304739942		Federal	GW	APD	

FORM 9

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

5. LEASE DESIGNATION AND SERIAL NUMBER: ML-44317

SUNDRY NOTICES AND REPORTS ON WELLS

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute Indian Tribe

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.

7. UNIT or CA AGREEMENT NAME: N/A

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER

8. WELL NAME and NUMBER: Ute Tribal 3-32-14-20

2. NAME OF OPERATOR: Whiting Oil and Gas Corporation

9. API NUMBER: 43-047-397 41

3. ADDRESS OF OPERATOR: 1700 Bdwy, STE 2300 CITY Denver STATE CO ZIP 80290-2300

PHONE NUMBER: (303) 390-4095

10. FIELD AND POOL, OR WILDCAT: Flat Rock

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 809' FNL & 1529' FWL

COUNTY: Uintah

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NENW 32 14S 20E SLPM

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: Spring 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: Permit Extension Request
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

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

Whiting Oil and Gas Corporation is requesting to extend the drilling permit on the subject well for an additional year.

Approved by the
Utah Division of
Oil, Gas and Mining

Date: 01-07-09

By:

NAME (PLEASE PRINT) Scott M. Webb TITLE Regulatory Coordinator

SIGNATURE DATE 1/2/2009

(This space for State use only)

COPY SENT TO OPERATOR
Date: 1.8.2009
Initials: KS

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

[redacted]

Application for Permit to Drill
Request for Permit Extension
Validation
(this form should accompany the Sundry Notice requesting permit extension)

API: 43-047-39741
Well Name: Ute Tribal 3-32-14-20
Location: NENW Section 32-T14S-R20E SLPM.
Company Permit Issued to: Miller Dyer & CO LLC
Date Original Permit Issued: 11/21/07

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 Scott M. Webb — Date 1/2/2009

Title: Regulatory Coordinator

Representing: Whiting Oil and Gas Corporation

API Well No: 43047397410000

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: ML-44317

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.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: UTE TRIBAL 3-32-14-20

2. NAME OF OPERATOR: WHITING OIL & GAS CORPORATION

9. API NUMBER: 43047397410000

3. ADDRESS OF OPERATOR: 1700 Broadway, Suite 2300 , Denver, CO, 80290 2300

PHONE NUMBER: 303 390-4095 Ext

9. FIELD and POOL or WILDCAT: FLAT ROCK

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0809 FNL 1529 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 32 Township: 14.0S Range: 20.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 8/24/2009	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	✓ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	✓ CHANGE WELL NAME
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ SPUD REPORT Date of Spud:	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

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

Whiting Oil and Gas would like to Directional Drill this well to a new BHL of 1980' FNL & 660' FWL SWNW in T14S, R20E, Section 32. They would like to change the name of the well to the Ute Tribal 5-32-14-20 to reflect that change. Attached please find the revised plat, drilling plan, directional drilling plan, fluid plan, and cementing plan.

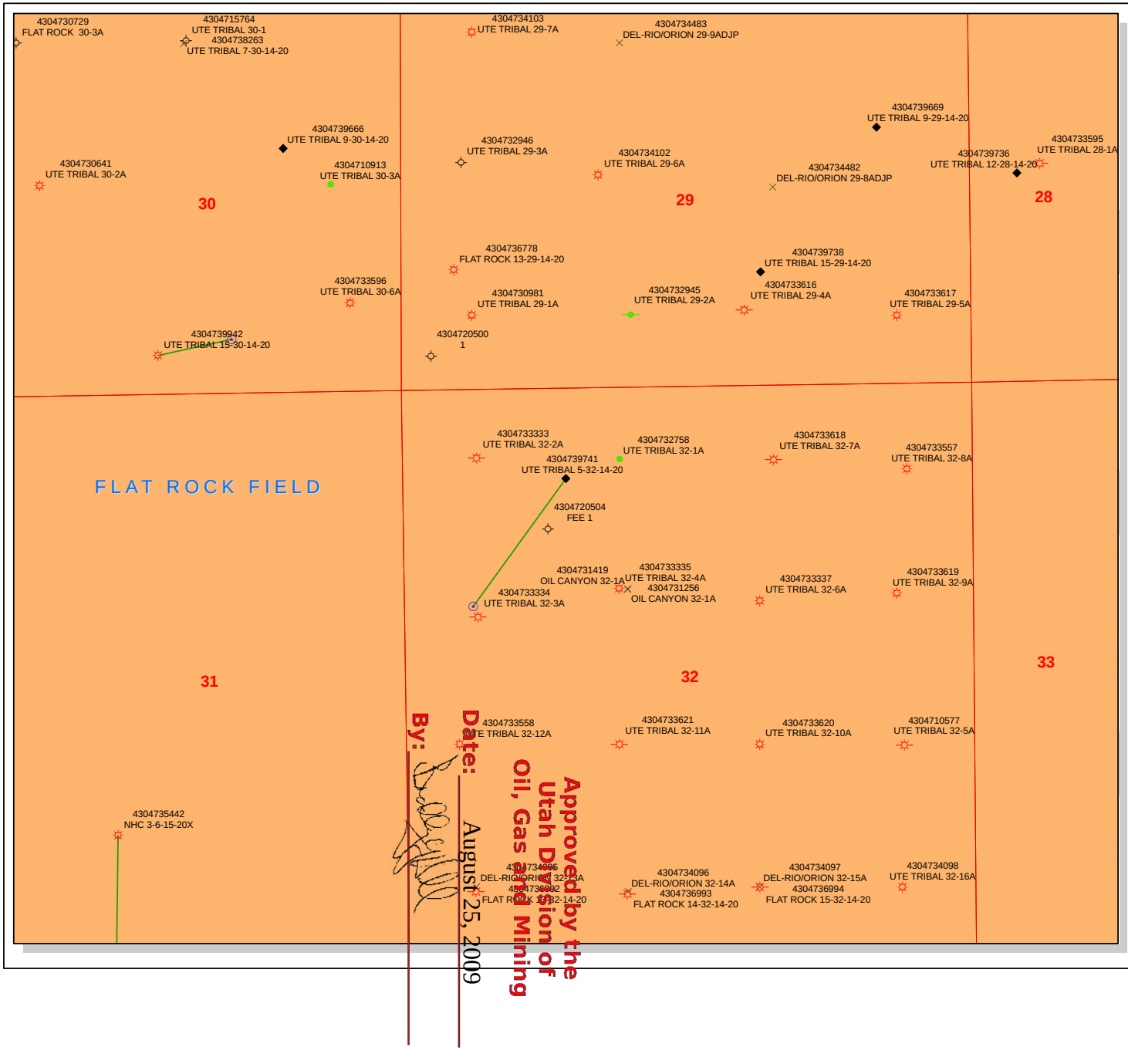
Approved by the Utah Division of Oil, Gas and Mining

Date: August 25, 2009

By: Dustin Doucet

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Terri Hartle	435 896-5501	Admin/Regulatory (Western Land Services)
SIGNATURE N/A		**DATE** 8/19/2009

RECEIVED August 19, 2009



API Number: 4304739741

Well Name: UTE TRIBAL 5-32-14-20

Township 14.0 S Range 20.0 E Section 32

Meridian: SLBM

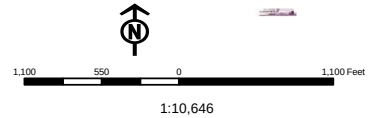
Operator: WHITING OIL & GAS CORPORATION

Map Prepared:
Map Produced by Diana Mason

Units
STATUS
ACTIVE
EXPLORATORY
GAS STORAGE
NF PP OIL
NF SECONDARY
PI OIL
PP GAS
PP GEOTHERML
PP OIL
SECONDARY
TERMINATED

Fields
STATUS
ACTIVE
COMBINED
Sections

Wells Query Events
<all other values>
GIS_STAT_TYPE
<Null>
APD
DRL
GI
GS
LA
NEW
OPS
PA
PGW
POW
RET
SGW
SOW
TA
TW
WD
WI
WS



1:10,646

WESTERN LAND SERVICES

August 19, 2009

Utah Division of Oil, Gas & Mining
Diana Mason
1594 W. N. Temple Suite 1210
Salt Lake City, Utah 84114-5801

RE: Whiting Oil and Gas Corporation (Whiting) Requests Permission to Drill the Ute Tribal 5-32-14-20 well

Diana:

Pursuant to Rule R649-3-11 of the State's Oil & Gas Conservation regulations, Whiting hereby makes application for approval to drill the Ute Tribal 5-32-14-20 well situated in Township 14 South – Range 20 East; Section 32: NE/NW (809' FNL – 1,529' FWL) on lands administered by the Utah Division of Oil, Gas and Mining (UDOGM). The surface is Ute Tribal lands and the minerals are held by the state. The state has leased the minerals out to Whiting under lease number ML-44317.

Whiting proposes to drill the Ute Tribal 5-32-14-20 well to a total depth of 11,850 feet and is an exception to Rule R649-3-3. Whiting is the only leasehold owner and operator within a 460 foot radius of the bore hole.

Whiting proposes to use a directional drilling program for the Ute Tribal 5-32-14-20 well with a bottom hole location of Township 14 South-Range 20 East; Section 32: SW/ NW (1,980' FNL – 660' FWL). This well is situated outside of the legal drilling window due to the steep terrain of the area. Other alternatives were identified but the proposed access route and well location provides the most environmentally sensitive options. Attached hereto is a plat as required by the Commissions rules and regulations.

If no objections are filed, the applicant requests that this application be approved. If objections are filed, applicant requests the matter be set for hearing and that it be advised of the hearing date.

Respectfully submitted,

Terri Hartle

Terri Hartle, Western Land Services
Designated Agent for Whiting Oil and Gas Corporation

WESTERN LAND SERVICES - UTAH DIVISION
195 North 100 East, Suite 201 • Richfield, UT 84701 • Phone: (435) 896-5501 • Fax: (435) 896-5515
Web: www.westernls.com

Whiting Oil & Gas Corp.
Ute Tribal 5-32-14-20 Well Plan
Directional Entrada well
Change in BHL & Casing Design

Surface Location: NENW 32-T14S-R20E SLB&M
809' FNL & 1529' FWL
Uintah County, Utah

SUMMARY:

Whiting Oil & Gas Corp. is requesting a change in BHL and Casing design for the Ute Tribal 5-32-14-20 well. The original location for the vertical well put the BHL in the NENW quarter/quarter. WOGC is requesting to move the BHL to the SWNW quarter/quarter. SHL will remain as per the original permit. This change is due to re-evaluation of the geological data since the permit was originally filed.

The well will be an openhole completion in the Entrada. 7" casing will be set at the top of the Entrada, and the Entrada drilled with a 6-1/8" bit. TD for the well will be 100' below the top of the Entrada, and above the Windgate. The openhole section will be drilled with an aerated fluid due to the low pressure (0.35 psi/ft) in the Entrada. The wellbore will cut the Entrada at a high angle, 20^{o} inclination, on a south to north trajectory. The build and hold directional design will allow the well path to intersect the east to west fracture network in the Entrada formation.

DRILLING PROGRAM

1. ESTIMATED TOPS OF GEOLOGICAL MARKERS:

Ground Level 7,499' Estimated KB 7,527' (28')

Formation	TVD	Core	Lithology	Hazard
Green River	28'		Oil Shale	Oil/Gas
Wasatch	2,357'		SS-SH	Oil/Gas
Mesaverde	4,457'		SS-SH	Oil
Castlegate SS	6,327'		Sandstone	Gas
Mancos	6,602'		SS-SH	Gas
Dakota	10,527'		Sandstone	Gas
Cedar Mtn	10,644'		Sandstone	Gas
Buckhorn Congl	10,760'		SS-SH	Gas
Morrison	10,827'		SS-SH	Gas
Curtis	11,394'		SS-SH	Gas
Entrada	11,537'		Sandstone	Gas
Carmel	11,750'		LS-SH	
Kayenta	11,807'		Sandstone	Gas
Total Depth	11,850'			

Bottom Hole Location: SWNW 32-T14S-R20E SLB&M
1980' FNL & 660' FWL
Uintah County, Utah

*See Attached Directional Well Plan

2. PRESSURE CONTROL EQUIPMENT

A. Type: 11” 5000 psi annular preventer
11” 5000 psi double ram hydraulic BOP
1 – Blind Ram
1 - Pipe Ram
Drilling Spool
Kill lines will be 2” x 5,000 psi working pressure
Choke lines will be 3” x 5,000 psi working pressure
5,000 psi Casing head

B. Testing Procedure:

The annular preventer will be pressure tested to 50% of stack rated working pressure for ten (10) minutes or until provisions of test are met, whichever is longer. The BOP, choke manifold, and related equipment will be pressure tested to approved BOP stack working pressure (if isolated from surface casing by a test plug) or to 70% of surface casing internal yield strength (if BOP is not isolated by a test plug). Pressure will be maintained for ten (10) minutes or until the requirements of the test are met, whichever is longer. At a minimum, the Annular and Blow-Out Preventer pressure tests will be performed:

1. When the BOPE is initially installed;
2. Whenever any seal subject to test pressure is broken;
3. Following related repairs; and
4. At thirty (30) day intervals.

Annular will be function tested weekly, and pipe & blind rams activated each trip, but not more than once per day. All BOP drills & tests will be recorded in IADC driller's log.

C. Choke Manifold Equipment:

All choke lines will be straight lines whenever possible at turns, tee blocks will be used or will be targeted with running tees, and will be anchored to prevent whip and vibration.

D. Accumulator:

Accumulator will have sufficient capacity to open hydraulically-controlled choke line valve (if so equipped), close all rams plus annular preventer, and retain a minimum of 200 psi above precharge on the closing manifold without the use of closing unit pumps. The fluid reservoir capacity will be double accumulator capacity and the fluid level will be maintained at manufacturer's recommendations. Accumulator precharge pressure test will be conducted prior to connecting the closing unit to the BOP stack.

E. Miscellaneous Information:

Choke manifold and BOP extension rods with hand wheels will be located outside rig sub-structure. Hydraulic BOP closing unit will be located at least twenty-five (25) feet from the wellhead but readily accessible to the driller. Exact locations and configurations of the hydraulic BOP closing unit will depend upon the particular rig contracted to drill this hole.
A flare line will be installed after the choke manifold with the discharge point of the flare line to a separate pit located at least 125 feet away from the wellbore and any existing production facilities.

3. PROPOSED CASING PROGRAM

Hole Size	Setting Depth (MD)	Casing Size	Wt./Ft.	Grade	Thread
17-1/2"	500'	13-3/8"	48.00	H-40	STC
12-1/4"	4,615'	9-5/8"	36.00	J-55	LTC
8-3/4"	11,676'	7"	29.00	L-80	LTC
6-1/8"	12,038'	Open Hole			

4. PROPOSED CEMENTING PROGRAM

SURFACE 500' MD: TOC Surface (100% Excess)

Single Stage (Includes Top Out): 389 sacks, Rockies LT

Cement Properties	Slurry
Slurry Weight (ppg)	13.5
Slurry Yield (cf/sack)	1.80

INTERMEDIATE 4,615' MD: TOC Surface (75% Excess, TOT: 4100' MD, TOL: 200' into surface casing)

Lead: 539 sacks Halliburton ECONOCEM SYSTEM

Tail: 253 sacks Halliburton Premium Cement

Cement Properties	Lead Slurry	Tail Slurry
Slurry Weight (ppg)	11.0	15.8
Slurry Yield (cf/sack)	3.81	1.15

PRODUCTION 11,676' MD: TOC Surface (40% Excess, TOT: 10,450' MD above the Dakota Silt, TOL: 200' into 9-5/8" casing)

Lead: 523 sacks Halliburton Foamed Lead Cement Elastiseal System

Tail: 327 sacks Halliburton Elastiseal System

Cement Properties	Lead Slurry	Tail Slurry
Slurry Weight (ppg)	14.30	14.30
Slurry Yield (cf/sack)	1.47	1.47

* See Attached cement program.

5. MUD PROGRAM

Depth (MD)	Mud System	MW	PV	YP	FL
0 - 500	Air	N/A	N/A	N/A	N/A
500' – 4,615'	Spud Mud	8.4 – 8.6	0 - 15	0 - 10	N/C
4,615' – 11,676'	3% KCL / Polymer	8.6 – 9.5	5 - 10	5 - 15	>8
11,676' - TD	3% KCL / Polymer Aerated	6.7 – 7.3	5 - 10	5 - 15	>8

Surface hole (0' – 500') will be drilled with the drilling rig using an air/foam package. Air/foam package will consist of compressors, booster, and foam unit. (See attached drawing and data). Package will compress 3200 SCFM of and air and a fluid package capable of pumping 60 gpm nominal, of fluid to 600 psig. This same package will move 2100 SCFM two staged @ 1500 psig.

Special Drilling Operations

- Rotating Head
- Blooie line discharge 100 feet from well bore and securely anchored
- Straight run on blooie line
- Compressors located in the opposite direction from the blooie line
- Compressors located a minimum of 100 feet the well bore

Entrada Open hole Section 11,676' – TD will be drilled with an Aerated 3% KCL / Polymer mud system to minimize formation damage due to low BHP. An air package will consist of compressors and booster. Package should provide 2500 SCFM @ 1500 psig.

*See attached Drilling Fluid Program

6. Testing, Logging and Core Programs

Cores: None planned
DST: None planned

Surveys: Per Directional Plan

Mud Logger: Surface

Samples: 30' samples from surface to Entrada
10' samples to TD

Open Hole Logging Program: Triple Combo TD to Surface Casing

7. ANTICIPATED ABNORMAL PRESSURES OR TEMPERATURES:

No H_2S gas is anticipated.

Maximum pressure at the base of the Curtis, 4,933 psi (0.433 psi/ft normal pressure gradient) at 11,394' TVD.

Anticipated bottomhole pressure at TD is 4,147 psi (0.35 psi/ft) at 11,850' TVD (6.73 ppg equivalent).

Normal BHT calculated at 1.25^{o}F/100' with a 65^{o}F surface Temperature.
BHT @ 11,850' TVD = 213^{o}F.

8. ANTICIPATED STARTING DATE AND DURATION:

Dirt work startup: August 2009

Spud: September 2009

Duration: 35 - 40 days

Whiting Petroleum

Uintah County, UT
Sec 32-14S-20E
UTE Tribal 5-32-14-20
Wellbore #1

Plan: Revised 08-06-09

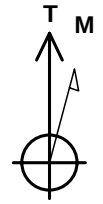
Standard Planning Report

06 August, 2009

Whiting Petroleum
UTE Tribal 5-32-14-20
Uintah County, UT
Revised 08-06-09

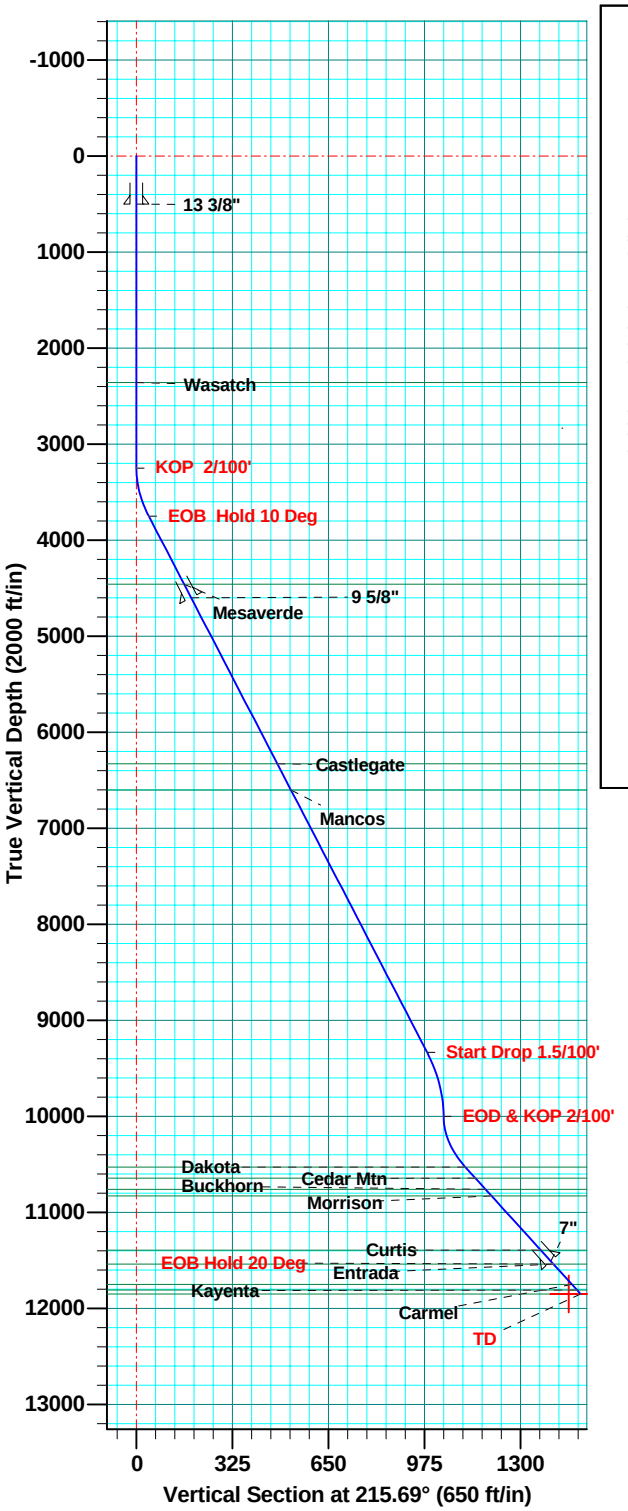
Whiting Petroleum Corporation

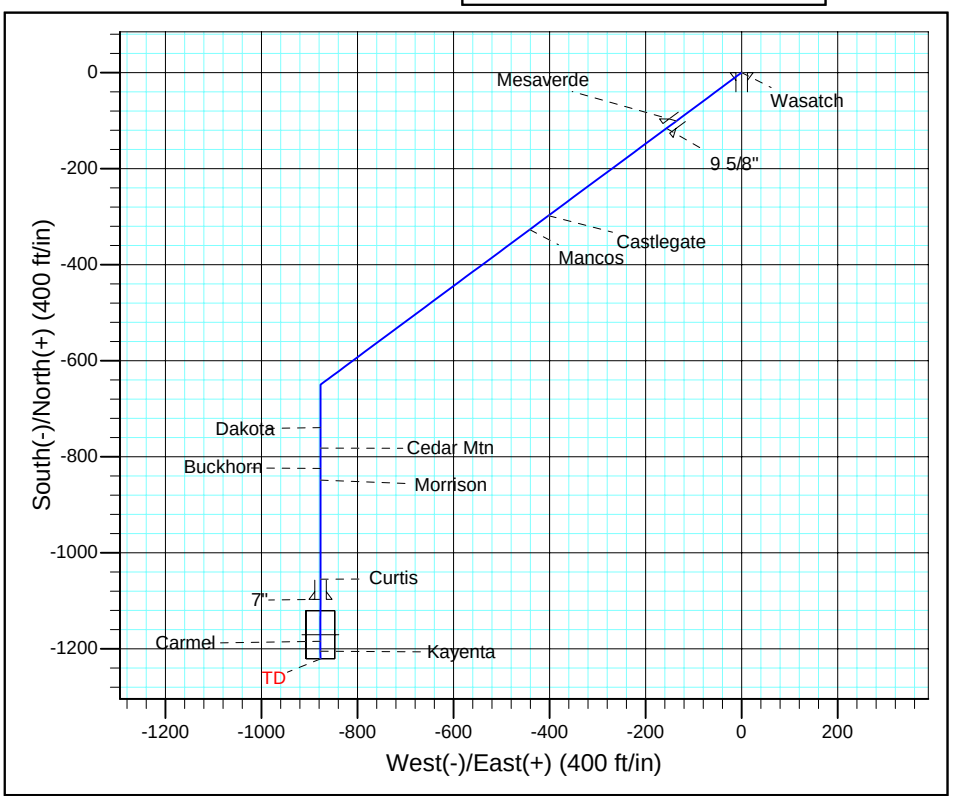
PROJECT DETAILS: Uintah County, UT	
Geodetic System:	US State Plane 1983
Datum:	North American Datum 1983
Ellipsoid:	GRS 1980
Zone:	Utah Central Zone
System Datum:	Ground Level



Azimuths to True North
Magnetic North: 11.31°

Magnetic Field
Strength: 52194.0snT
Dip Angle: 65.52°
Date: 8/6/2009
Model: IGRF200510





FORMATION TOP DETAILS

TVDPath	MDPath	Formation
2357.0	2357.0	Wasatch
4457.0	4470.6	Mesaverde
6327.0	6369.7	Castlegate
6602.0	6649.0	Mancos
10527.0	10630.0	Dakota
10644.0	10754.5	Cedar Mtn
10760.0	10877.9	Buckhorn
10827.0	10949.2	Morrison
11394.0	11552.6	Curtis
11537.0	11704.8	Entrada
11750.0	11931.5	Carmel
11807.0	11992.1	Kayenta
11850.0	12037.9	TD

August 19, 2009

Crescent Directional Drilling

Planning Report

Database:	EDM 2003.16 Single User Db	**Local Co-ordinate Reference:**	Well UTE Tribal 5-32-14-20
Company:	Whiting Petroleum	**TVD Reference:**	WELL @ 7525.2ft (Bronco #27)
Project:	Uintah County, UT	**MD Reference:**	WELL @ 7525.2ft (Bronco #27)
Site:	Sec 32-14S-20E	**North Reference:**	True
Well:	UTE Tribal 5-32-14-20	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Revised 08-06-09		

Project Uintah County, UT

Map System:	US State Plane 1983	**System Datum:**	Ground Level
Geo Datum:	North American Datum 1983		
Map Zone:	Utah Central Zone		

Site Sec 32-14S-20E

Site Position:		**Northing:**	2,137,821.89 m	**Latitude:**	39° 33' 39.020 N
From:	Lat/Long	**Easting:**	654,150.95 m	**Longitude:**	109° 42' 21.530 W
Position Uncertainty:	0.0 ft	**Slot Radius:**	in	**Grid Convergence:**	1.15 °

Well UTE Tribal 5-32-14-20

Well Position	**+N/-S**	0.0 ft	**Northing:**	2,137,821.89 m	**Latitude:**	39° 33' 39.020 N
	+E/-W	0.0 ft	**Easting:**	654,150.95 m	**Longitude:**	109° 42' 21.530 W
Position Uncertainty		0.0 ft	**Wellhead Elevation:**	28.0 ft	**Ground Level:**	28.0 ft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	8/6/2009	11.31	65.52	52,194

Design Revised 08-06-09

Audit Notes:

Version:		**Phase:**	PROTOTYPE	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	215.69

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,250.0	0.00	0.00	3,250.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,752.3	10.05	233.46	3,749.7	-26.1	-35.3	2.00	2.00	0.00	233.46	
9,423.3	10.05	233.46	9,333.8	-615.1	-830.0	0.00	0.00	0.00	0.00	
10,092.9	0.00	0.00	10,000.0	-650.0	-877.0	1.50	-1.50	0.00	180.00	
10,649.7	20.00	180.00	10,545.6	-746.2	-877.0	3.59	3.59	0.00	180.00	
11,704.8	20.00	180.00	11,537.0	-1,107.0	-877.0	0.00	0.00	0.00	0.00	
12,037.9	20.01	180.00	11,850.0	-1,221.0	-877.0	0.00	0.00	0.00	0.00	

Database:	EDM 2003.16 Single User Db	**Local Co-ordinate Reference:**	Well UTE Tribal 5-32-14-20
Company:	Whiting Petroleum	**TVD Reference:**	WELL @ 7525.2ft (Bronco #27)
Project:	Uintah County, UT	**MD Reference:**	WELL @ 7525.2ft (Bronco #27)
Site:	Sec 32-14S-20E	**North Reference:**	True
Well:	UTE Tribal 5-32-14-20	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Revised 08-06-09		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
13 3/8"									
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,357.0	0.00	0.00	2,357.0	0.0	0.0	0.0	0.00	0.00	0.00
Wasatch									
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,250.0	0.00	0.00	3,250.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP 2/100'									
3,300.0	1.00	233.46	3,300.0	-0.3	-0.4	0.4	2.00	2.00	0.00
3,400.0	3.00	233.46	3,399.9	-2.3	-3.2	3.7	2.00	2.00	0.00
3,500.0	5.00	233.46	3,499.7	-6.5	-8.8	10.4	2.00	2.00	0.00
3,600.0	7.00	233.46	3,599.1	-12.7	-17.2	20.3	2.00	2.00	0.00
3,700.0	9.00	233.46	3,698.2	-21.0	-28.3	33.6	2.00	2.00	0.00
3,752.3	10.05	233.46	3,749.7	-26.2	-35.3	41.8	2.00	2.00	0.00
EOB Hold 10 Deg									
3,800.0	10.05	233.46	3,796.7	-31.1	-42.0	49.8	0.00	0.00	0.00
3,900.0	10.05	233.46	3,895.2	-41.5	-56.0	66.4	0.00	0.00	0.00
4,000.0	10.05	233.46	3,993.6	-51.9	-70.0	83.0	0.00	0.00	0.00
4,100.0	10.05	233.46	4,092.1	-62.3	-84.0	99.6	0.00	0.00	0.00
4,200.0	10.05	233.46	4,190.6	-72.7	-98.0	116.2	0.00	0.00	0.00
4,300.0	10.05	233.46	4,289.0	-83.0	-112.0	132.8	0.00	0.00	0.00
4,400.0	10.05	233.46	4,387.5	-93.4	-126.1	149.4	0.00	0.00	0.00
4,470.6	10.05	233.46	4,457.0	-100.8	-135.9	161.1	0.00	0.00	0.00

Database:	EDM 2003.16 Single User Db	**Local Co-ordinate Reference:**	Well UTE Tribal 5-32-14-20
Company:	Whiting Petroleum	**TVD Reference:**	WELL @ 7525.2ft (Bronco #27)
Project:	Uintah County, UT	**MD Reference:**	WELL @ 7525.2ft (Bronco #27)
Site:	Sec 32-14S-20E	**North Reference:**	True
Well:	UTE Tribal 5-32-14-20	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Revised 08-06-09		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
Mesaverde									
4,500.0	10.05	233.46	4,486.0	-103.8	-140.1	166.0	0.00	0.00	0.00
4,600.0	10.05	233.46	4,584.4	-114.2	-154.1	182.6	0.00	0.00	0.00
4,615.8	10.05	233.46	4,600.0	-115.8	-156.3	185.3	0.00	0.00	0.00
9 5/8"									
4,700.0	10.05	233.46	4,682.9	-124.6	-168.1	199.2	0.00	0.00	0.00
4,800.0	10.05	233.46	4,781.4	-135.0	-182.1	215.9	0.00	0.00	0.00
4,900.0	10.05	233.46	4,879.8	-145.4	-196.1	232.5	0.00	0.00	0.00
5,000.0	10.05	233.46	4,978.3	-155.7	-210.1	249.1	0.00	0.00	0.00
5,100.0	10.05	233.46	5,076.8	-166.1	-224.1	265.7	0.00	0.00	0.00
5,200.0	10.05	233.46	5,175.2	-176.5	-238.2	282.3	0.00	0.00	0.00
5,300.0	10.05	233.46	5,273.7	-186.9	-252.2	298.9	0.00	0.00	0.00
5,400.0	10.05	233.46	5,372.2	-197.3	-266.2	315.5	0.00	0.00	0.00
5,500.0	10.05	233.46	5,470.7	-207.7	-280.2	332.1	0.00	0.00	0.00
5,600.0	10.05	233.46	5,569.1	-218.1	-294.2	348.7	0.00	0.00	0.00
5,700.0	10.05	233.46	5,667.6	-228.4	-308.2	365.3	0.00	0.00	0.00
5,800.0	10.05	233.46	5,766.1	-238.8	-322.2	382.0	0.00	0.00	0.00
5,900.0	10.05	233.46	5,864.5	-249.2	-336.2	398.6	0.00	0.00	0.00
6,000.0	10.05	233.46	5,963.0	-259.6	-350.3	415.2	0.00	0.00	0.00
6,100.0	10.05	233.46	6,061.5	-270.0	-364.3	431.8	0.00	0.00	0.00
6,200.0	10.05	233.46	6,159.9	-280.4	-378.3	448.4	0.00	0.00	0.00
6,300.0	10.05	233.46	6,258.4	-290.8	-392.3	465.0	0.00	0.00	0.00
6,369.7	10.05	233.46	6,327.0	-298.0	-402.1	476.6	0.00	0.00	0.00
Castlegate									
6,400.0	10.05	233.46	6,356.9	-301.1	-406.3	481.6	0.00	0.00	0.00
6,500.0	10.05	233.46	6,455.3	-311.5	-420.3	498.2	0.00	0.00	0.00
6,600.0	10.05	233.46	6,553.8	-321.9	-434.3	514.8	0.00	0.00	0.00
6,649.0	10.05	233.46	6,602.0	-327.0	-441.2	523.0	0.00	0.00	0.00
Mancos									
6,700.0	10.05	233.46	6,652.3	-332.3	-448.4	531.5	0.00	0.00	0.00
6,800.0	10.05	233.46	6,750.7	-342.7	-462.4	548.1	0.00	0.00	0.00
6,900.0	10.05	233.46	6,849.2	-353.1	-476.4	564.7	0.00	0.00	0.00
7,000.0	10.05	233.46	6,947.7	-363.5	-490.4	581.3	0.00	0.00	0.00
7,100.0	10.05	233.46	7,046.1	-373.8	-504.4	597.9	0.00	0.00	0.00
7,200.0	10.05	233.46	7,144.6	-384.2	-518.4	614.5	0.00	0.00	0.00
7,300.0	10.05	233.46	7,243.1	-394.6	-532.4	631.1	0.00	0.00	0.00
7,400.0	10.05	233.46	7,341.5	-405.0	-546.4	647.7	0.00	0.00	0.00
7,500.0	10.05	233.46	7,440.0	-415.4	-560.5	664.3	0.00	0.00	0.00
7,600.0	10.05	233.46	7,538.5	-425.8	-574.5	680.9	0.00	0.00	0.00
7,700.0	10.05	233.46	7,636.9	-436.2	-588.5	697.6	0.00	0.00	0.00
7,800.0	10.05	233.46	7,735.4	-446.5	-602.5	714.2	0.00	0.00	0.00
7,900.0	10.05	233.46	7,833.9	-456.9	-616.5	730.8	0.00	0.00	0.00
8,000.0	10.05	233.46	7,932.3	-467.3	-630.5	747.4	0.00	0.00	0.00
8,100.0	10.05	233.46	8,030.8	-477.7	-644.5	764.0	0.00	0.00	0.00
8,200.0	10.05	233.46	8,129.3	-488.1	-658.5	780.6	0.00	0.00	0.00
8,300.0	10.05	233.46	8,227.7	-498.5	-672.6	797.2	0.00	0.00	0.00
8,400.0	10.05	233.46	8,326.2	-508.9	-686.6	813.8	0.00	0.00	0.00
8,500.0	10.05	233.46	8,424.7	-519.2	-700.6	830.4	0.00	0.00	0.00
8,600.0	10.05	233.46	8,523.1	-529.6	-714.6	847.0	0.00	0.00	0.00
8,700.0	10.05	233.46	8,621.6	-540.0	-728.6	863.7	0.00	0.00	0.00
8,800.0	10.05	233.46	8,720.1	-550.4	-742.6	880.3	0.00	0.00	0.00
8,900.0	10.05	233.46	8,818.5	-560.8	-756.6	896.9	0.00	0.00	0.00
9,000.0	10.05	233.46	8,917.0	-571.2	-770.7	913.5	0.00	0.00	0.00

Database:	EDM 2003.16 Single User Db	**Local Co-ordinate Reference:**	Well UTE Tribal 5-32-14-20
Company:	Whiting Petroleum	**TVD Reference:**	WELL @ 7525.2ft (Bronco #27)
Project:	Uintah County, UT	**MD Reference:**	WELL @ 7525.2ft (Bronco #27)
Site:	Sec 32-14S-20E	**North Reference:**	True
Well:	UTE Tribal 5-32-14-20	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Revised 08-06-09		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,100.0	10.05	233.46	9,015.5	-581.6	-784.7	930.1	0.00	0.00	0.00
9,200.0	10.05	233.46	9,113.9	-591.9	-798.7	946.7	0.00	0.00	0.00
9,300.0	10.05	233.46	9,212.4	-602.3	-812.7	963.3	0.00	0.00	0.00
9,400.0	10.05	233.46	9,310.9	-612.7	-826.7	979.9	0.00	0.00	0.00
9,423.3	10.05	233.46	9,333.8	-615.1	-830.0	983.8	0.00	0.00	0.00
Start Drop 1.5/100'									
9,500.0	8.89	233.46	9,409.5	-622.7	-840.1	995.8	1.50	-1.50	0.00
9,600.0	7.39	233.46	9,508.5	-631.1	-851.5	1,009.3	1.50	-1.50	0.00
9,700.0	5.89	233.46	9,607.8	-638.0	-860.8	1,020.3	1.50	-1.50	0.00
9,800.0	4.39	233.46	9,707.4	-643.3	-868.0	1,028.9	1.50	-1.50	0.00
9,900.0	2.89	233.46	9,807.2	-647.1	-873.1	1,034.9	1.50	-1.50	0.00
10,000.0	1.39	233.46	9,907.1	-649.3	-876.1	1,038.5	1.50	-1.50	0.00
10,092.9	0.00	233.46	10,000.0	-650.0	-877.0	1,039.6	1.50	-1.50	0.00
EOD & KOP 2/100'									
10,100.0	0.25	180.00	10,007.1	-650.0	-877.0	1,039.6	3.57	3.56	-750.76
10,200.0	3.85	180.00	10,107.0	-653.6	-877.0	1,042.5	3.59	3.59	0.00
10,300.0	7.44	180.00	10,206.5	-663.4	-877.0	1,050.5	3.59	3.59	0.00
10,400.0	11.03	180.00	10,305.2	-679.5	-877.0	1,063.5	3.59	3.59	0.00
10,500.0	14.62	180.00	10,402.7	-701.7	-877.0	1,081.5	3.59	3.59	0.00
10,600.0	18.21	180.00	10,498.6	-729.9	-877.0	1,104.5	3.59	3.59	0.00
10,630.0	19.29	180.00	10,527.0	-739.6	-877.0	1,112.3	3.59	3.59	0.00
Dakota									
10,649.7	20.00	180.00	10,545.6	-746.2	-877.0	1,117.7	3.59	3.59	0.00
10,700.0	20.00	180.00	10,592.8	-763.4	-877.0	1,131.7	0.00	0.00	0.00
10,754.5	20.00	180.00	10,644.0	-782.0	-877.0	1,146.8	0.00	0.00	0.00
Cedar Mtn									
10,800.0	20.00	180.00	10,686.8	-797.6	-877.0	1,159.4	0.00	0.00	0.00
10,877.9	20.00	180.00	10,760.0	-824.2	-877.0	1,181.1	0.00	0.00	0.00
Buckhorn									
10,900.0	20.00	180.00	10,780.8	-831.8	-877.0	1,187.2	0.00	0.00	0.00
10,949.2	20.00	180.00	10,827.0	-848.6	-877.0	1,200.9	0.00	0.00	0.00
Morrison									
11,000.0	20.00	180.00	10,874.7	-866.0	-877.0	1,215.0	0.00	0.00	0.00
11,100.0	20.00	180.00	10,968.7	-900.2	-877.0	1,242.8	0.00	0.00	0.00
11,200.0	20.00	180.00	11,062.7	-934.4	-877.0	1,270.5	0.00	0.00	0.00
11,300.0	20.00	180.00	11,156.6	-968.6	-877.0	1,298.3	0.00	0.00	0.00
11,400.0	20.00	180.00	11,250.6	-1,002.8	-877.0	1,326.1	0.00	0.00	0.00
11,500.0	20.00	180.00	11,344.6	-1,037.0	-877.0	1,353.9	0.00	0.00	0.00
11,552.6	20.00	180.00	11,394.0	-1,055.0	-877.0	1,368.5	0.00	0.00	0.00
Curtis									
11,600.0	20.00	180.00	11,438.5	-1,071.2	-877.0	1,381.7	0.00	0.00	0.00
11,676.1	20.00	180.00	11,510.0	-1,097.2	-877.0	1,402.8	0.00	0.00	0.00
7"									
11,700.0	20.00	180.00	11,532.5	-1,105.4	-877.0	1,409.4	0.00	0.00	0.00
11,704.8	20.00	180.00	11,537.0	-1,107.0	-877.0	1,410.8	0.00	0.00	0.00
EOB Hold 20 Deg - Entrada									
11,800.0	20.00	180.00	11,626.5	-1,139.6	-877.0	1,437.2	0.00	0.00	0.00
11,900.0	20.01	180.00	11,720.5	-1,173.8	-877.0	1,465.0	0.00	0.00	0.00
11,931.5	20.02	180.00	11,750.0	-1,184.6	-877.0	1,473.7	0.04	0.04	0.00
Carmel									
11,992.1	20.01	180.00	11,807.0	-1,205.3	-877.0	1,490.6	0.01	-0.01	0.00
Kayenta									

Database:	EDM 2003.16 Single User Db	**Local Co-ordinate Reference:**	Well UTE Tribal 5-32-14-20
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Project:	Uintah County, UT	**MD Reference:**	WELL @ 7525.2ft (Bronco #27)
Site:	Sec 32-14S-20E	**North Reference:**	True
Well:	UTE Tribal 5-32-14-20	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Revised 08-06-09		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
12,000.0	20.01	180.00	11,814.4	-1,208.0	-877.0	1,492.8	0.05	-0.05	0.00
12,020.8	20.01	180.00	11,833.9	-1,215.1	-877.0	1,498.6	0.00	0.00	0.00
UTE 5-32-14-20									
12,037.9	20.01	180.00	11,850.0	-1,221.0	-877.0	1,503.3	0.01	0.01	0.00
TD									

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (m)	Easting (m)	Latitude	Longitude
UTE 5-32-14-20	0.00	0.00	11,850.0	-1,171.0	-877.0	2,137,459.68	653,890.85	39° 33' 27.446 N	109° 42' 32.728 W

- plan misses target center by 47.0ft at 12020.8ft MD (11833.9 TVD, -1215.1 N, -877.0 E)
- Rectangle (sides W100.0 H60.0 D0.0)

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
500.0	500.0	13 3/8"	13.375	17.500
4,615.8	4,600.0	9 5/8"	9.625	12.250
11,676.1	11,510.0	7"	7.000	8.750

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
12,037.9	11,850.0	TD		0.00	
2,357.0	2,357.0	Wasatch		0.00	
11,992.1	11,807.0	Kayenta		0.00	
10,630.0	10,527.0	Dakota		0.00	
4,470.6	4,457.0	Mesaverde		0.00	
11,704.8	11,537.0	Entrada		0.00	
10,877.9	10,760.0	Buckhorn		0.00	
6,369.7	6,327.0	Castlegate		0.00	
11,552.6	11,394.0	Curtis		0.00	
10,949.2	10,827.0	Morrison		0.00	
11,931.5	11,750.0	Carmel		0.00	
6,649.0	6,602.0	Mancos		0.00	
10,754.5	10,644.0	Cedar Mtn		0.00	

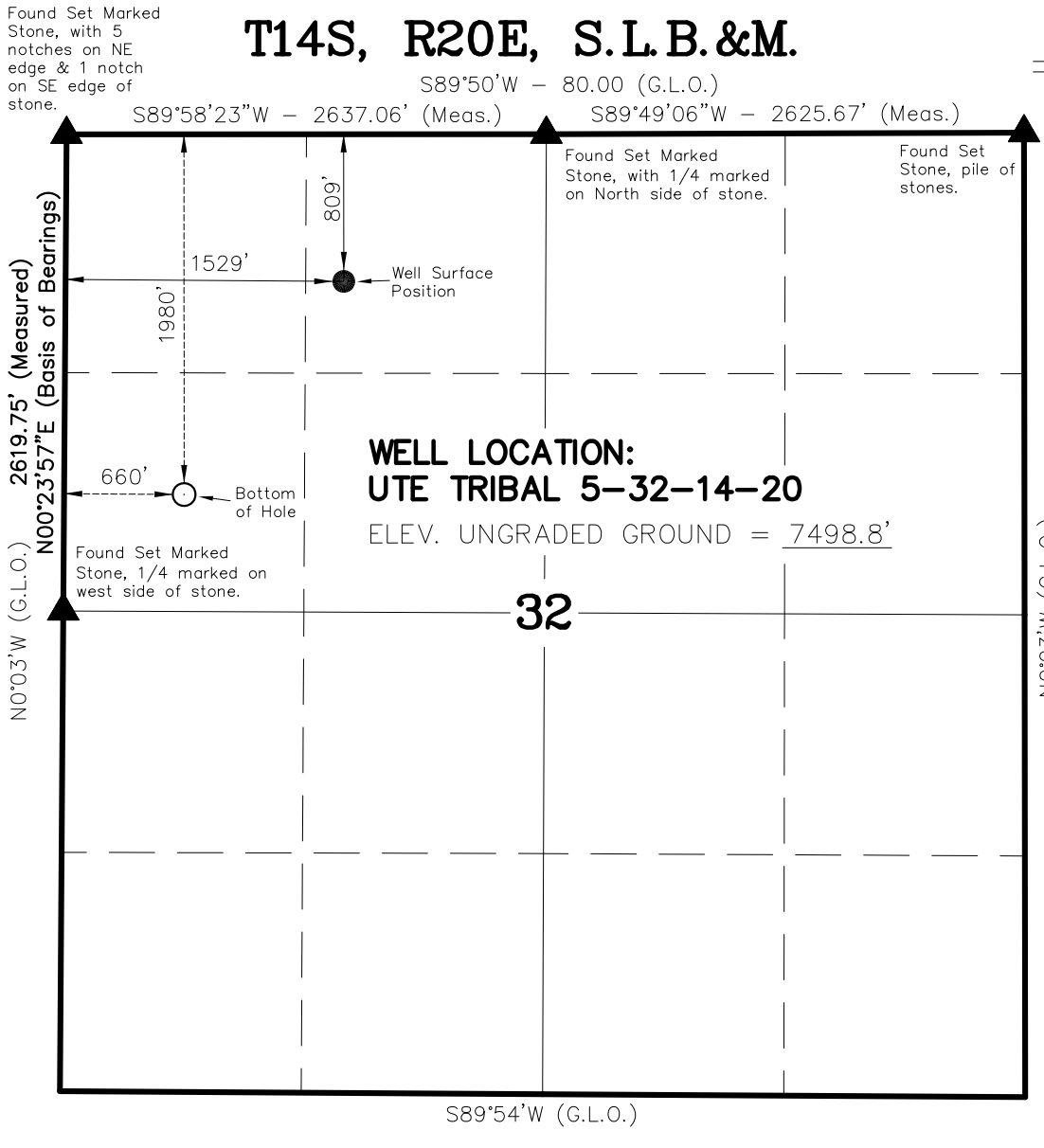
Database:	EDM 2003.16 Single User Db	**Local Co-ordinate Reference:**	Well UTE Tribal 5-32-14-20
Company:	Whiting Petroleum	**TVD Reference:**	WELL @ 7525.2ft (Bronco #27)
Project:	Uintah County, UT	**MD Reference:**	WELL @ 7525.2ft (Bronco #27)
Site:	Sec 32-14S-20E	**North Reference:**	True
Well:	UTE Tribal 5-32-14-20	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Revised 08-06-09		

Plan Annotations

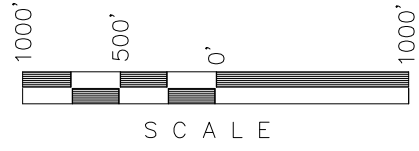
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
3,250.0	3,250.0	0.0	0.0	KOP 2/100'
3,752.3	3,749.7	-26.2	-35.3	EOB Hold 10 Deg
9,423.3	9,333.8	-615.1	-830.0	Start Drop 1.5/100'
10,092.9	10,000.0	-650.0	-877.0	EOD & KOP 2/100'
11,704.8	11,537.0	-1,107.1	-877.0	EOB Hold 20 Deg

T14S, R20E, S.L.B.&M.

WHITING OIL AND GAS CORPORATION



WELL LOCATION, UTE TRIBAL 5–32–14–20, LOCATED AS SHOWN IN THE SW 1/4 NW 1/4 OF SECTION 32, T14S, R20E, S.L.B.&M. UINTAH COUNTY, UTAH.



NOTES:

1. Well footages are measured at right angles to the Section Lines.
2. G.L.O. distances are shown in feet or chains. 1 chain = 66 feet.
3. The Bottom of hole bears S36°50'10"W 1463.53' from the Surface Position.
4. Bearings are based on Global Positioning Satellite observations.
5. BASIS OF ELEVATION IS BENCH MARK 60 WF 1952 LOCATED IN THE SW 1/4 OF SECTION 35, T14S, R20E, S.L.B.&M. THE ELEVATION OF THIS BENCH MARK IS SHOWN ON THE FLAT ROCK MESA 7.5 MIN. QUADRANGLE AS BEING 7363'.

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Kolby R. Kay

REGISTERED LAND SURVEYOR
REGISTRATION NO. 362251
STATE OF UTAH

REGISTERED LAND SURVEYOR No.362251 KOLBY R. KAY STATE OF UTAH

August 19, 2009

▲ = SECTION CORNERS LOCATED

UTE TRIBAL 5–32–14–20
(Bottom Hole) NAD 83 Autonomous
LATITUDE = 39° 33' 27.45"
LONGITUDE = 109° 42' 32.73"

UTE TRIBAL 5–32–14–20
(Surface Position) NAD 83 Autonomous
LATITUDE = 39° 33' 39.02"
LONGITUDE = 109° 42' 21.53"

TIMBERLINE (435) 789–1365
ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST – VERNAL, UTAH 84078

DATE SURVEYED: 09–07–07	SURVEYED BY: B.J.S.	SHEET 2 OF 11
DATE DRAWN: 09–25–07	DRAWN BY: M.W.W.	
SCALE: 1" = 1000'	Date Last Revised: 08–03–09	

WHITING OIL AND GAS CORPORATION

WELL PAD INTERFERENCE PLAT

UTE TRIBAL 5-32-14-20

BASIS OF ELEVATION IS BENCH MARK 60 WF 1952 LOCATED IN THE SW 1/4 OF SECTION 35, T14S, R20E, S.L.B.&M. THE ELEVATION OF THIS BENCH MARK IS SHOWN ON THE FLAT ROCK MESA 7.5 MIN. QUADRANGLE AS BEING 7363'.

BASIS OF BEARINGS IS THE WEST LINE OF THE NW 1/4 OF SECTION 32, T14S, R20E, S.L.B.&M. WHICH IS TAKEN FROM GLOBAL POSITIONING SATELLITE OBSERVATIONS TO BEAR N00°23'57"E.

N

Existing Road

SURFACE POSITION FOOTAGES:

UTE TRIBAL 5-32-14-20
809' FNL & 1529' FWL

BOTTOM HOLE FOOTAGES

UTE TRIBAL 5-32-14-20
1980' FNL & 660' FWL

PROPOSED GRADED GROUND ELEVATION OF PAD IS 7497.2'.

N88°41'21"W

UTE TRIBAL 5-32-14-20

S36°50'10"W - 1463.53' (To Bottom Hole)

LATITUDE & LONGITUDE
Surface Position - (NAD 83) Autonomous

WELL	N. LATITUDE	W. LONGITUDE
5-32-14-20	39°33'39.02"	109°42'21.53"

LATITUDE & LONGITUDE
Bottom Hole - (NAD 83) Autonomous

WELL	N. LATITUDE	W. LONGITUDE
5-32-14-20	39°33'27.45"	109°42'32.73"

RELATIVE COORDINATES
From Surface Position to Bottom Hole

WELL	NORTH	EAST
5-32-14-20	-1,171'	-877'

60' 30' 0' 60'

SCALE

Section 32, T14S, R20E, S.L.B.&M. | Qtr/Qtr Location: NE NW (Surface)

Date Surveyed: 09-07-07	Date Drawn: 08-04-09	Date Last Revision:
Surveyed By: B.J.S.	Drawn By: M.W.W.	Scale: 1" = 60'

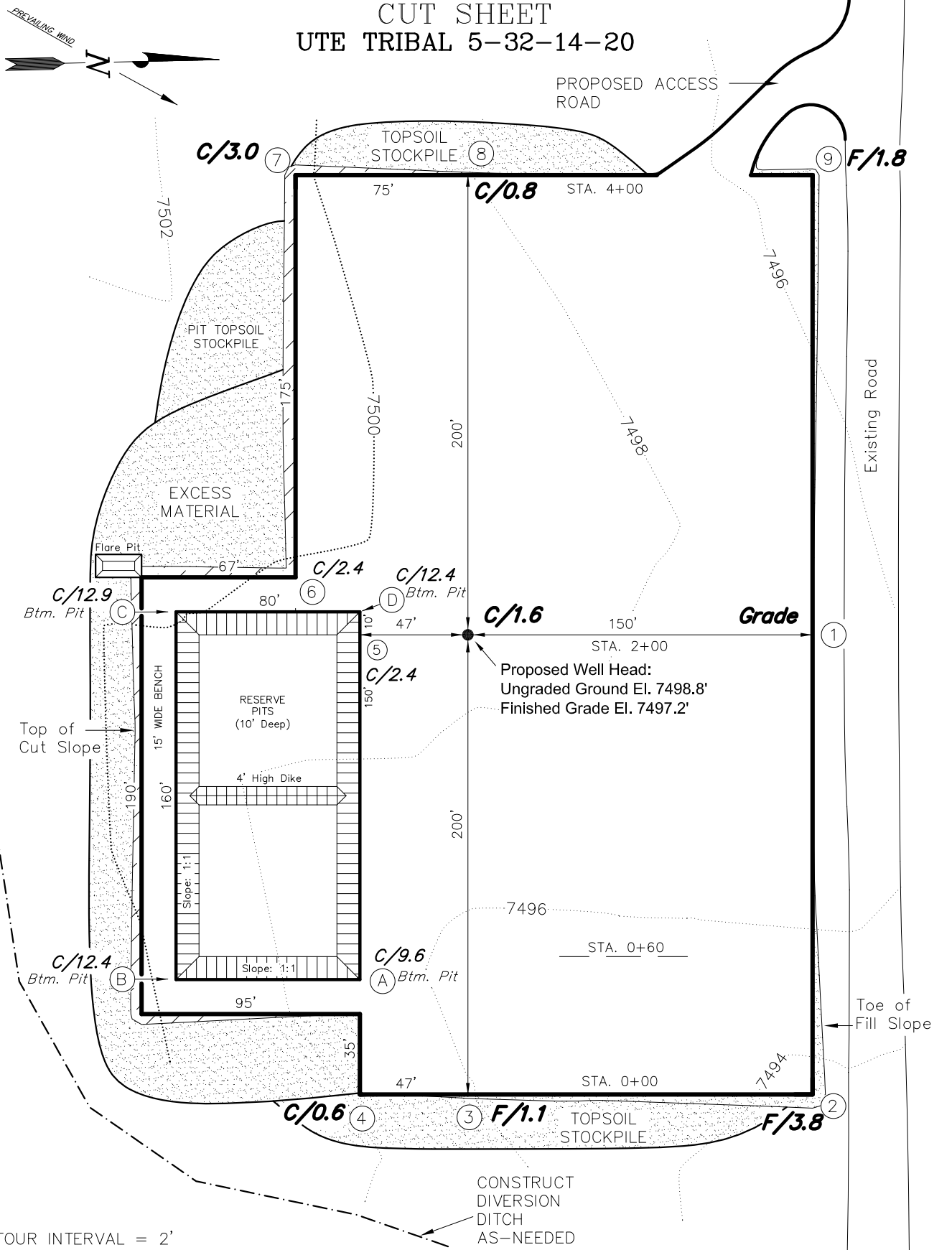
Timberline (435) 789-1365
Engineering & Land Surveying, Inc.
209 NORTH 300 WEST VERNAL, UTAH 84078

August 19, 2009

WHITING OIL AND GAS CORPORATION

CUT SHEET

UTE TRIBAL 5-32-14-20



Section 32, T14S, R20E, S.L.B.&M.	Qtr/Qtr Location: NE NW (Surface)			
Date Surveyed: 09-07-07	Date Drawn: 09-25-07	Date Last Revision: 08-04-09	Timberline Engineering & Land Surveying, Inc. (435) 789-1365 209 NORTH 300 WEST VERNAL, UTAH 84078	SHEET 4 OF 11
Surveyed By: B.J.S..	Drawn By: M.W.W.	Scale: 1" = 60'		

August 19, 2009

RECOMMENDED BY	
Central Rockies	
REVISIONS:	
1	**DATE:**
2	**DATE:**

WHITING PETROLEUM CORP.
1700 BROADWAY Suite 2300
Denver. CO 80290
303-837-1661

WELL INFORMATION				
API:	43-047-39741-00		**AFE:**	
WELL NAME:	UTE TRIBAL 5-32-14-20		**ACQUISITION:**	CEA
PROSPECT:	FLAT ROCK		**RESERVE CATEGORY:**	
SURFACE LOCATION:	NENW 32 14S 20E		**SURFACE LONG, LAT:**	-109.7052200, 39.5609000
SURFACE FOOTAGE:	809 FNL 1529 FWL		**BOTTOM HOLE LONG, LAT:**	
BOTTOM HOLE LOCATION:	SWNW 32 14S 20E		**SURVEYED ELEVATION (GR):**	7,499
BOTTOM HOLE FOOTAGE:	1980 FNL 660 FWL		**HEIGHT TO KB:**	28
COUNTY:	Uintah		**ACTUAL ELEV. (KB):**	7,527
STATE:	UT		**TVD (if horizontal well):**	ft.
LOCATION MAY BE MOVED:			**TMD (if horizontal well):**	ft.
PROPOSED TOTAL DEPTH (TVD):	11,850		**FORMATION AT TD:**	Wingate

FORMATION	TOP - TVD	TOP - TVDSS	INTVL	CORE	LITHOLOGY	GEOLOGIC HAZARDS
Green River Fm @ Surface	28	7,499	2,329		Oil Shale	oil and/or gas anticipated
Wasatch Fm	2,357	5,170	2,100		SS-SH	oil and/or gas anticipated
Mesaverde	4,457	3,070	1,870		SS-SH	oil and/or gas anticipated
Castlegate SS	6,327	1,200	275		Sandstone	gas
Mancos	6,602	925	505		SS-SH	gas
Mancos B	7,107	420	3,325		Sandstone	gas
Dakota Silt	10,432	(2,905)	95		Sandstone	gas
Dakota	10,527	(3,000)	117		Sandstone	gas
Cedar Mtn Fm	10,644	(3,117)	116		Sandstone	gas
Buckhorn Congl	10,760	(3,233)	67		SS-SH	gas
Morrison Fm	10,827	(3,300)	567		SS-SH	
Curtis Fm	11,394	(3,867)	143		SS-SH	
Entrada SS	11,537	(4,010)	213		Sandstone	gas
Carmel	11,750	(4,223)	57		LS-SH	
Kayenta	11,807	(4,280)	140		Sandstone	gas
~~Wingate~~	~~11,947~~	~~(4,420)~~	~~(97)~~		~~Sandstone~~	~~gas~~
TD	11,850	(4,323)				

WIRELINE LOGS		CORING & CUTTINGS	
LOGGING COMPANY:		**CORING TOOL CO:**	
TRIPLE COMBO	YES	**CORE ANALYSIS CO:**	
FROM:	TD to surf		
		30' SAMPLES:	Surf Csg **TO:** TD
		10' SAMPLES:	**TO:**
		SHIP CUTTINGS TO:	Larry Rasmussen
			Whiting Petroleum Corp.
			1700 Broadway, Ste 2300
			Denver, CO 80290

WELLSITE GEOLOGIST		MUD LOGGER	
NAME:		**NAME:**	
PHONE		**PHONE**	
STARTING DEPTH:		**STARTING DEPTH:**	Surface Csg

NOTIFICATIONS		OFFICE	MOBILE	HOME
1st	Larry Rasmussen - Geologist	303-390-4093	720-272-5978	303-561-0788
2nd	John Forster - Regional Geol Manager	303-390-4117	303-324-7690	303-850-0346
3rd	Dana Greathouse - Regional Drilling Mgr	303-390-4247	303-808-3687	303-730-1204
4th	Tom Smith - Sr. Operations Engineer	303-390-4124	720-283-3272	

SPECIAL INSTRUCTIONS: Anticipate continuous gas from Wasatch through the Entrada, possibly Wingate.
Expect underpressured reservoirs, 0.35 psi/ft, Bottom Hole Temperature of ~230F

Prepared by: Larry Rasmussen 7/31/2009

August 19, 2009

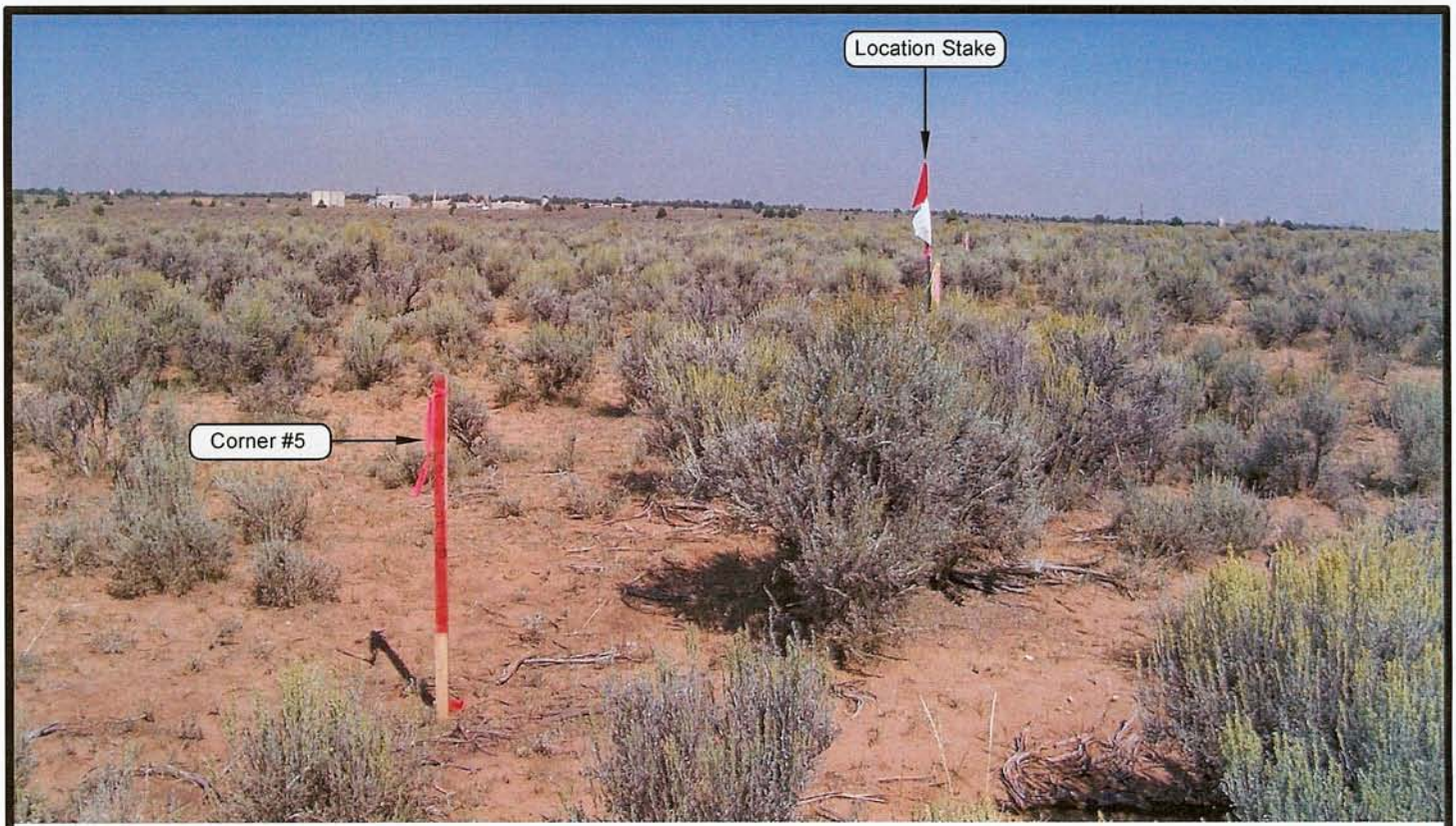


PHOTO VIEW: FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHERLY

PHOTO VIEW: FROM BEGINNING OF PROPOSED ROAD

CAMERA ANGLE: SOUTHEASTERLY

WHITING OIL AND GAS CORPORATION

Ute Tribal 5-32-14-20
SECTION 32, T14S, R20E, S.L.B.&M.
809' FNL & 1529' FWL (Surface)

LOCATION PHOTOS		DATE TAKEN: 09-07-07
		DATE DRAWN: 09-26-07
TAKEN BY: B.J.S.	DRAWN BY: M.W.W.	REVISED: 08-04-09

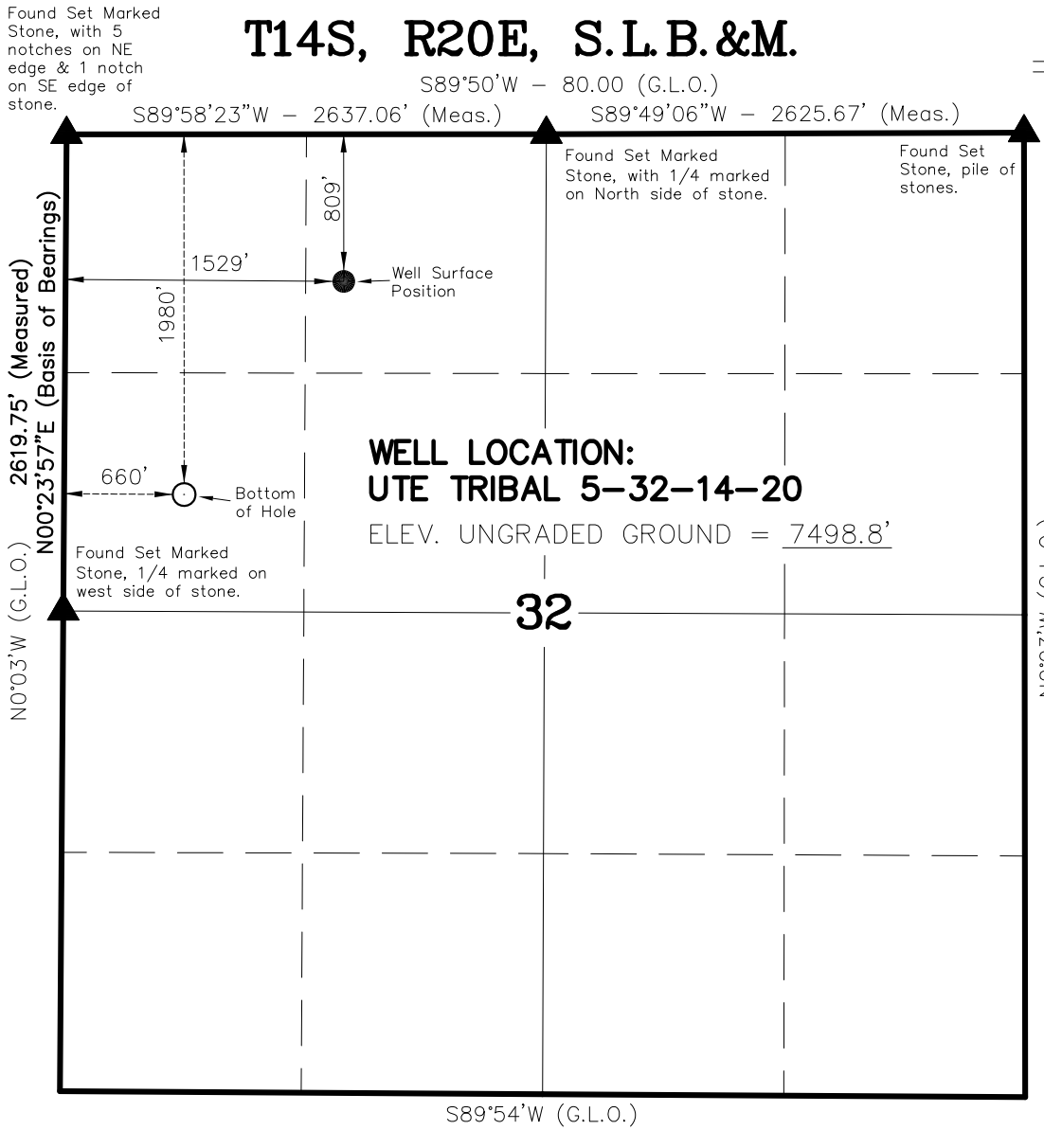
Timberline (435) 789-1365
Engineering & Land Surveying, Inc.
209 NORTH 300 WEST VERNAL, UTAH 84078

SHEET 1 OF 11

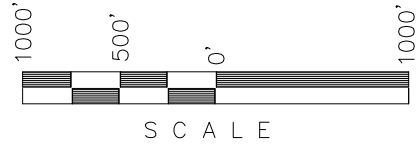
August 19, 2009

T14S, R20E, S.L.B.&M.

WHITING OIL AND GAS CORPORATION



WELL LOCATION, UTE TRIBAL 5–32–14–20, LOCATED AS SHOWN IN THE SW 1/4 NW 1/4 OF SECTION 32, T14S, R20E, S.L.B.&M. UINTAH COUNTY, UTAH.



NOTES:

1. Well footages are measured at right angles to the Section Lines.
2. G.L.O. distances are shown in feet or chains. 1 chain = 66 feet.
3. The Bottom of hole bears S36°50'10"W 1463.53' from the Surface Position.
4. Bearings are based on Global Positioning Satellite observations.
5. BASIS OF ELEVATION IS BENCH MARK 60 WF 1952 LOCATED IN THE SW 1/4 OF SECTION 35, T14S, R20E, S.L.B.&M. THE ELEVATION OF THIS BENCH MARK IS SHOWN ON THE FLAT ROCK MESA 7.5 MIN. QUADRANGLE AS BEING 7363'.

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Kolby R. Kay

REGISTERED LAND SURVEYOR
REGISTRATION NO. 362251
STATE OF UTAH

REGISTERED LAND SURVEYOR No.362251 KOLBY R. KAY STATE OF UTAH

August 19, 2009

▲ = SECTION CORNERS LOCATED

UTE TRIBAL 5–32–14–20
(Bottom Hole) NAD 83 Autonomous
LATITUDE = 39° 33' 27.45"
LONGITUDE = 109° 42' 32.73"

UTE TRIBAL 5–32–14–20
(Surface Position) NAD 83 Autonomous
LATITUDE = 39° 33' 39.02"
LONGITUDE = 109° 42' 21.53"

TIMBERLINE (435) 789–1365
ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST – VERNAL, UTAH 84078

DATE SURVEYED: 09–07–07	SURVEYED BY: B.J.S.	SHEET 2 OF 11
DATE DRAWN: 09–25–07	DRAWN BY: M.W.W.	
SCALE: 1" = 1000'	Date Last Revised: 08–03–09	

WHITING OIL AND GAS CORPORATION

WELL PAD INTERFERENCE PLAT

UTE TRIBAL 5-32-14-20

BASIS OF ELEVATION IS BENCH MARK 60 WF 1952 LOCATED IN THE SW 1/4 OF SECTION 35, T14S, R20E, S.L.B.&M. THE ELEVATION OF THIS BENCH MARK IS SHOWN ON THE FLAT ROCK MESA 7.5 MIN. QUADRANGLE AS BEING 7363'.

BASIS OF BEARINGS IS THE WEST LINE OF THE NW 1/4 OF SECTION 32, T14S, R20E, S.L.B.&M. WHICH IS TAKEN FROM GLOBAL POSITIONING SATELLITE OBSERVATIONS TO BEAR N00°23'57"E.

N

Existing Road

SURFACE POSITION FOOTAGES:

UTE TRIBAL 5-32-14-20
809' FNL & 1529' FWL

BOTTOM HOLE FOOTAGES

UTE TRIBAL 5-32-14-20
1980' FNL & 660' FWL

PROPOSED GRADED GROUND ELEVATION OF PAD IS 7497.2'.

N88°41'21"W

UTE TRIBAL 5-32-14-20

S36°50'10"W - 1463.53' (To Bottom Hole)

LATITUDE & LONGITUDE
Surface Position - (NAD 83) Autonomous

WELL	N. LATITUDE	W. LONGITUDE
5-32-14-20	39°33'39.02"	109°42'21.53"

LATITUDE & LONGITUDE
Bottom Hole - (NAD 83) Autonomous

WELL	N. LATITUDE	W. LONGITUDE
5-32-14-20	39°33'27.45"	109°42'32.73"

RELATIVE COORDINATES
From Surface Position to Bottom Hole

WELL	NORTH	EAST
5-32-14-20	-1,171'	-877'

60' 30' 0' 60'

SCALE

Section 32, T14S, R20E, S.L.B.&M. | Qtr/Qtr Location: NE NW (Surface)

Date Surveyed: 09-07-07	Date Drawn: 08-04-09	Date Last Revision:
Surveyed By: B.J.S.	Drawn By: M.W.W.	Scale: 1" = 60'

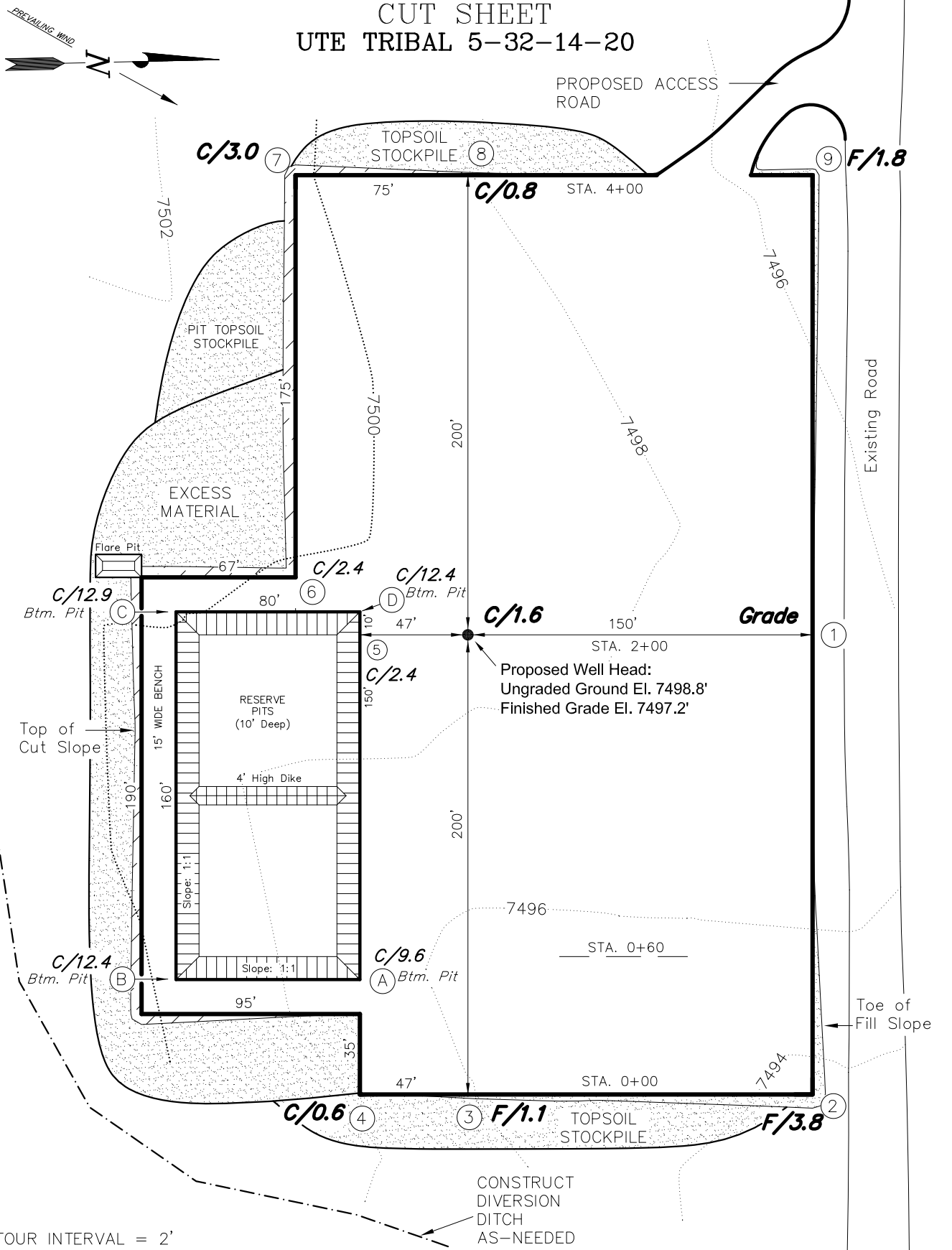
Timberline (435) 789-1365
Engineering & Land Surveying, Inc.
209 NORTH 300 WEST VERNAL, UTAH 84078

August 19, 2009

WHITING OIL AND GAS CORPORATION

CUT SHEET

UTE TRIBAL 5-32-14-20



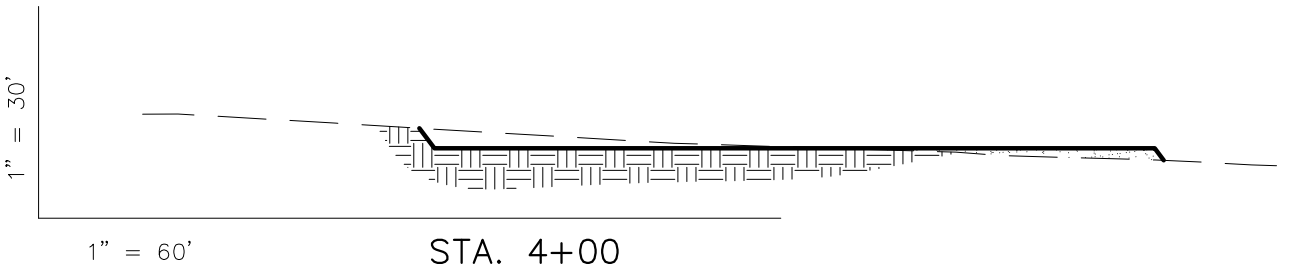
Section 32, T14S, R20E, S.L.B.&M.	Qtr/Qtr Location: NE NW (Surface)			
Date Surveyed: 09-07-07	Date Drawn: 09-25-07	Date Last Revision: 08-04-09	Timberline Engineering & Land Surveying, Inc. (435) 789-1365 209 NORTH 300 WEST VERNAL, UTAH 84078	SHEET 4 OF 11
Surveyed By: B.J.S..	Drawn By: M.W.W.	Scale: 1" = 60'		

August 19, 2009

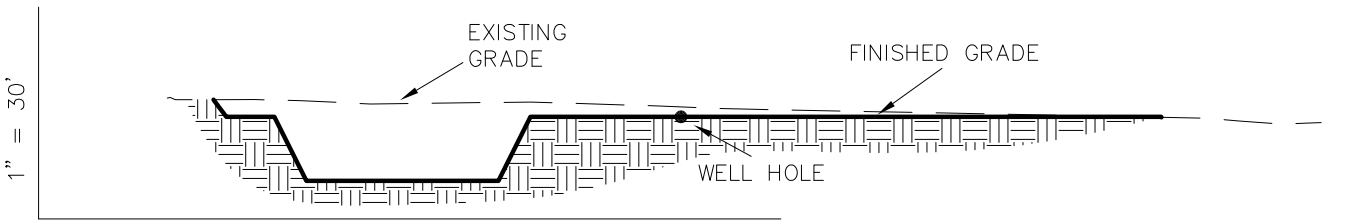
WHITING OIL AND GAS CORPORATION

CROSS SECTIONS

UTE TRIBAL 5-32-14-20



STA. 4+00



STA. 2+00

STA. 0+60

NOTE:
UNLESS OTHERWISE NOTED
ALL CUT/FILL SLOPES ARE
AT 1.5:1

STA. 0+00

REFERENCE POINTS

200' NORTHERLY = 7496.4'
250' NORTHERLY = 7495.5'
250' EASTERLY = 7497.0'
300' EASTERLY = 7496.6'

Pit overburden is included in pad cut.

ESTIMATED EARTHWORK QUANTITIES
(No shrink or swell adjustments have been used)
(Expressed in Cubic Yards)

ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	2,200	2,200	Topsoil is not included in Pad Cut	0
PIT	3,850	0		3,850
TOTALS	6,050	2,200	1,880	3,850

Excess Material after Pit Rehabilitation = 0 Cu. Yds.

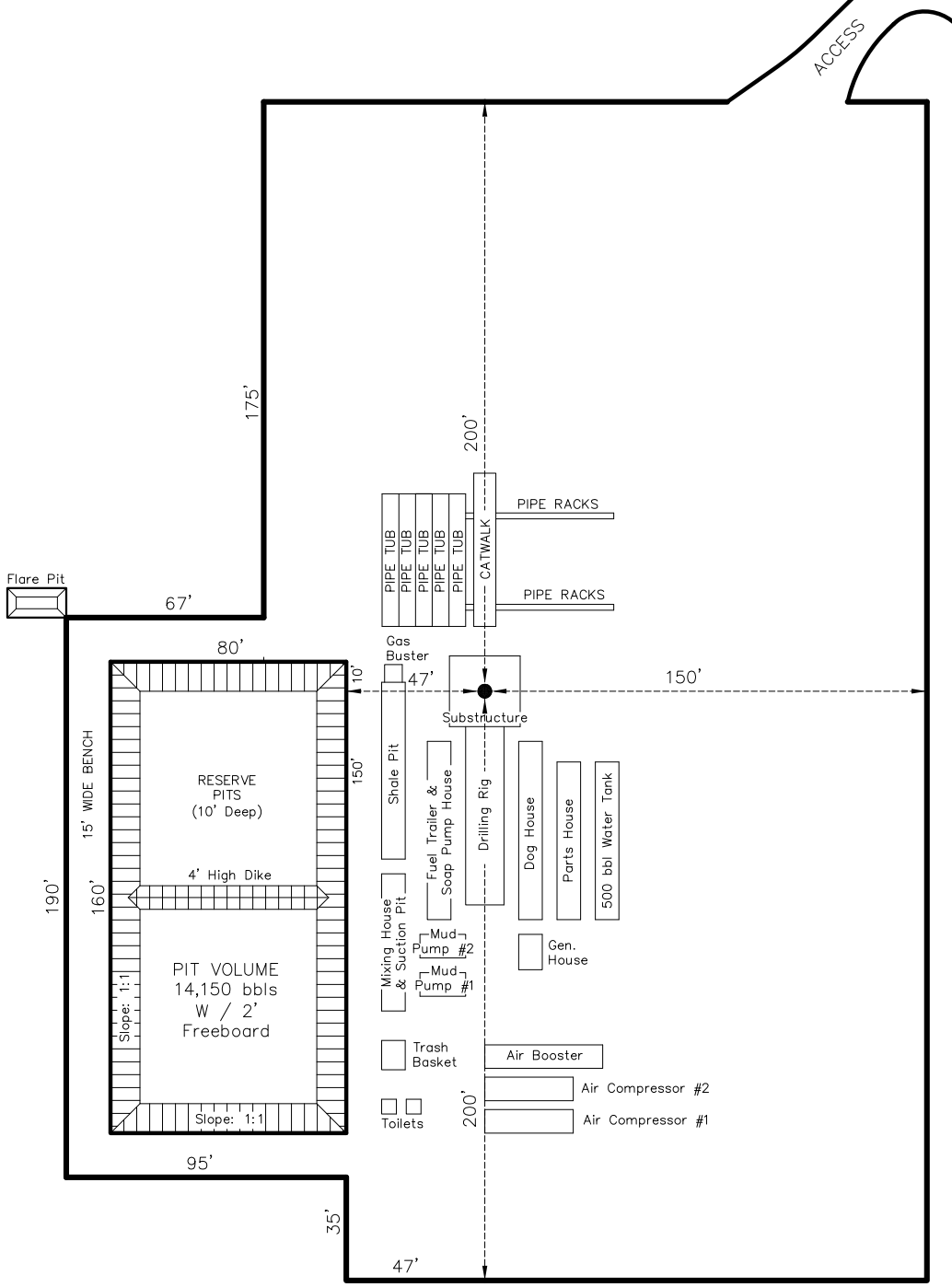
Section 32, T14S, R20E, S.L.B.&M.	Qtr/Qtr Location: NE NW (Surface)			
Date Surveyed: 09-07-07	Date Drawn: 09-25-07	Date Last Revision: 08-04-09	*Timberline* (435) 789-1365 *Engineering & Land Surveying, Inc.* 209 NORTH 300 WEST VERNAL, UTAH 84078	SHEET 5 OF 11
Surveyed By: B.J.S..	Drawn By: M.W.W.	Scale: 1" = 60'		

August 19, 2009

WHITING OIL AND GAS CORPORATION

TYPICAL RIG LAYOUT

UTE TRIBAL 5-32-14-20



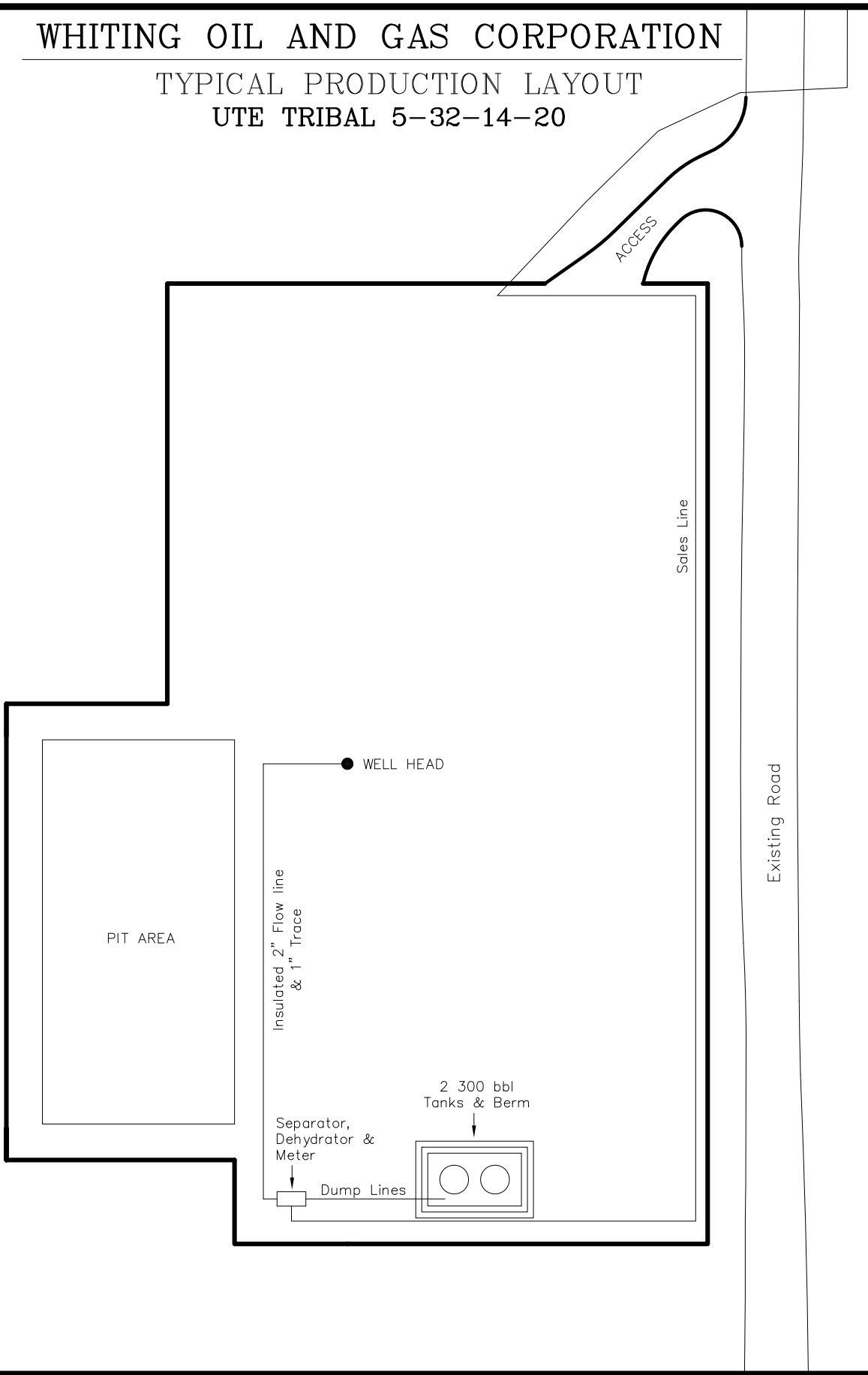
Section 32, T14S, R20E, S.L.B.&M.	Qtr/Qtr Location: NE NW (Surface)			
Date Surveyed: 09-07-07	Date Drawn: 09-25-07	Date Last Revision: 08-04-09	*Timberline* (435) 789-1365 *Engineering & Land Surveying, Inc.* 209 NORTH 300 WEST VERNAL, UTAH 84078	SHEET 6 OF 11
Surveyed By: B.J.S..	Drawn By: M.W.W.	Scale: 1" = 60'		

August 19, 2009

WHITING OIL AND GAS CORPORATION

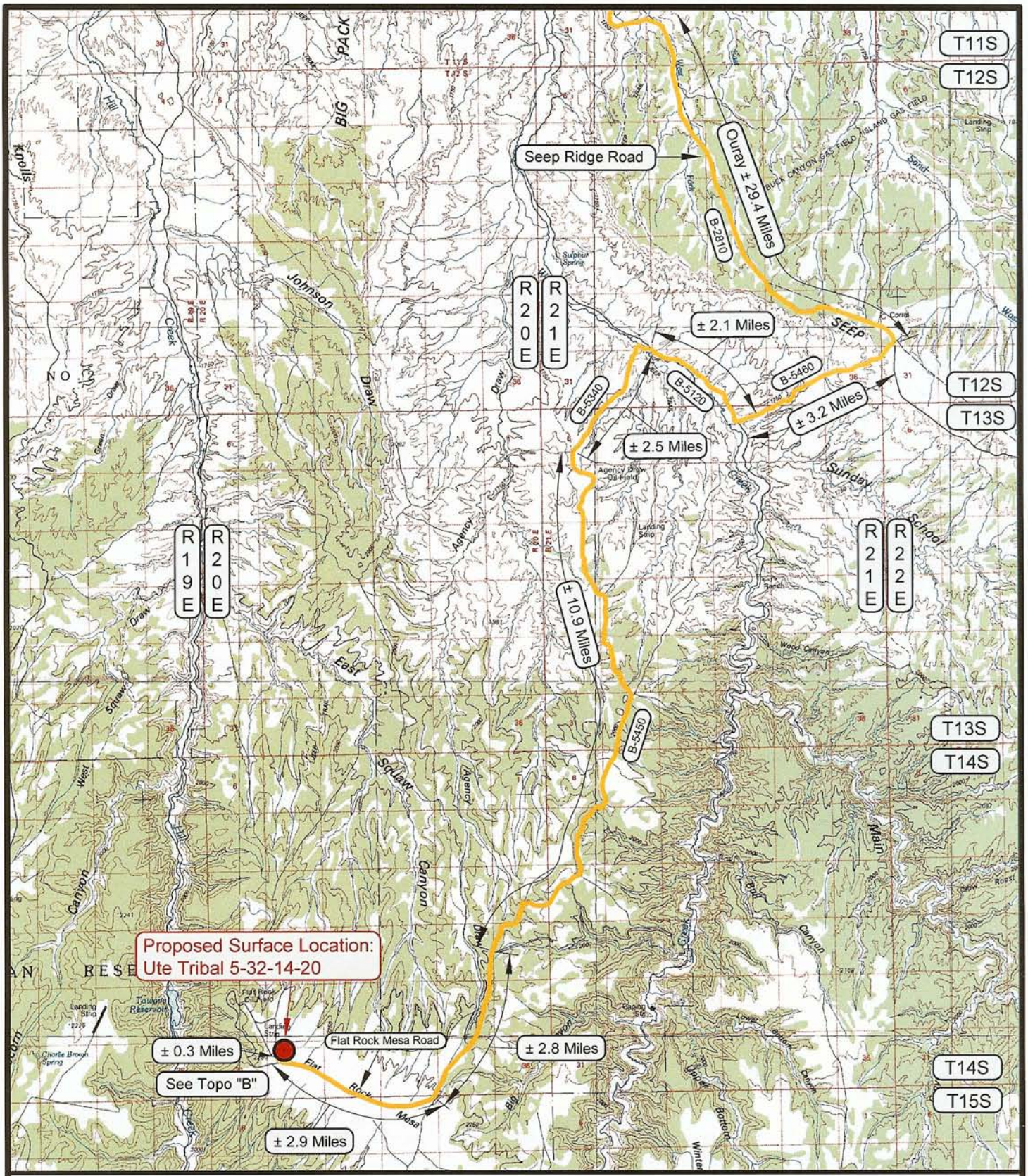
TYPICAL PRODUCTION LAYOUT

UTE TRIBAL 5-32-14-20



Section 32, T14S, R20E, S.L.B.&M.	Qtr/Qtr Location: NE NW (Surface)			
Date Surveyed: 09-07-07	Date Drawn: 09-25-07	Date Last Revision: 08-04-09	*Timberline* (435) 789-1365 *Engineering & Land Surveying, Inc.* 209 NORTH 300 WEST VERNAL, UTAH 84078	SHEET 7 OF 11
Surveyed By: B.J.S..	Drawn By: M.W.W.	Scale: 1" = 60'		

August 19, 2009



LEGEND

PROPOSED ACCESS ROAD
= SUBJECT WELL
= OTHER WELLS
= EXISTING ROAD
= EXISTING ROAD (TO BE IMPROVED)

B-5460 = COUNTY ROAD CLASS & NUMBER

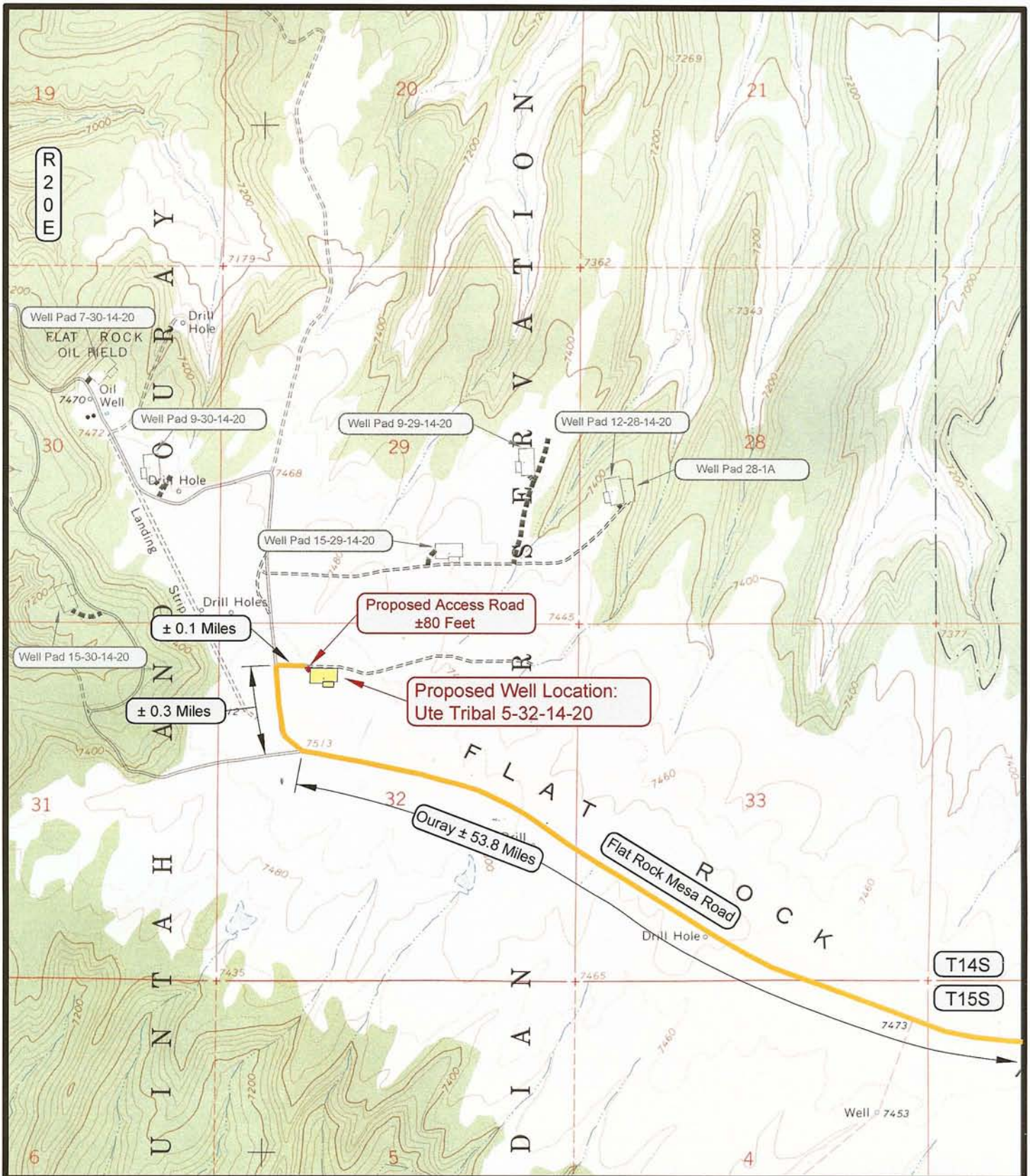
WHITING OIL AND GAS CORPORATION

Ute Tribal 5-32-14-20
SECTION 32, T14S, R20E, S.L.B.&M.
809' FNL & 1529' FWL (Surface)

TOPOGRAPHIC MAP "A"	DATE SURVEYED: 09-07-07
	DATE DRAWN: 09-26-07
SCALE: 1:150,000 DRAWN BY: M.W.W.	REVISED: 08-04-09

Timberline Engineering & Land Surveying, Inc.
(435) 789-1365
209 NORTH 300 WEST VERNAL, UTAH 84078

August 19, 2009



LEGEND

PROPOSED ACCESS ROAD
= SUBJECT WELL
= SHARED ACCESS
= EXISTING ROAD
= EXISTING ROAD (TO BE IMPROVED)
B-5460 = COUNTY ROAD CLASS & NUMBER
= LEASE LINE AND / OR PROPERTY LINE

N

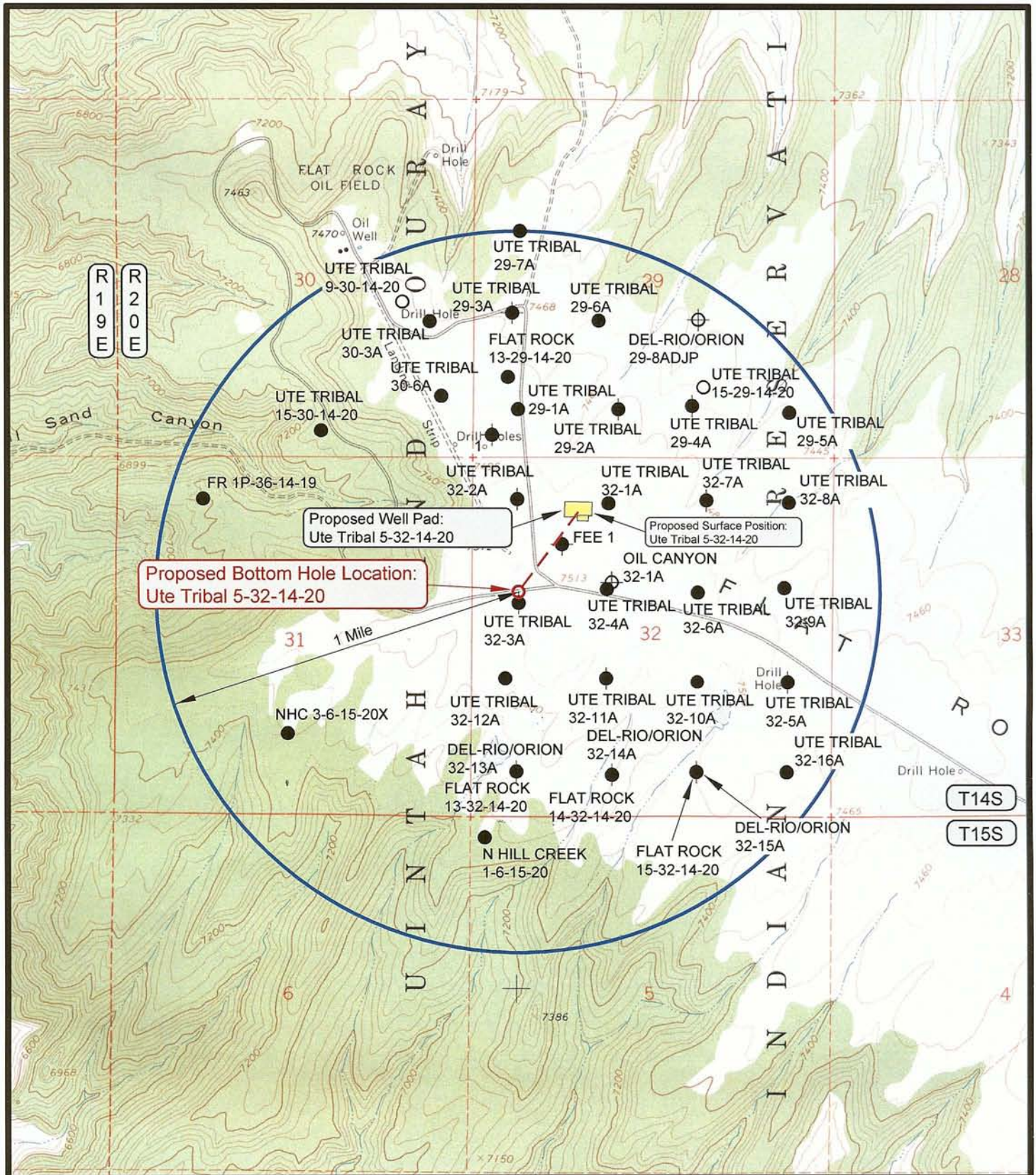
WHITING OIL AND GAS CORPORATION

Ute Tribal 5-32-14-20
SECTION 32, T14S, R20E, S.L.B.&M.
809' FNL & 1529' FWL (Surface)

TOPOGRAPHIC MAP "B"		DATE SURVEYED: 09-07-07
		DATE DRAWN: 09-26-07
SCALE: 1" = 2000'	DRAWN BY: M.W.W.	REVISED: 08-04-09

Timberline Engineering & Land Surveying, Inc.
(435) 789-1365
209 NORTH 300 WEST VERNAL, UTAH 84078

August 19, 2009



LEGEND

- ∅ = DISPOSAL WELL
- ● = PRODUCING WELL
- ● = SHUT IN WELL
- ○ = PROPOSED WELL
- ∅ = WATER WELL
- ● = ABANDONED WELL
- ● = TEMPORARILY ABANDONED WELL
- ⊕ = ABANDONED LOCATION

N

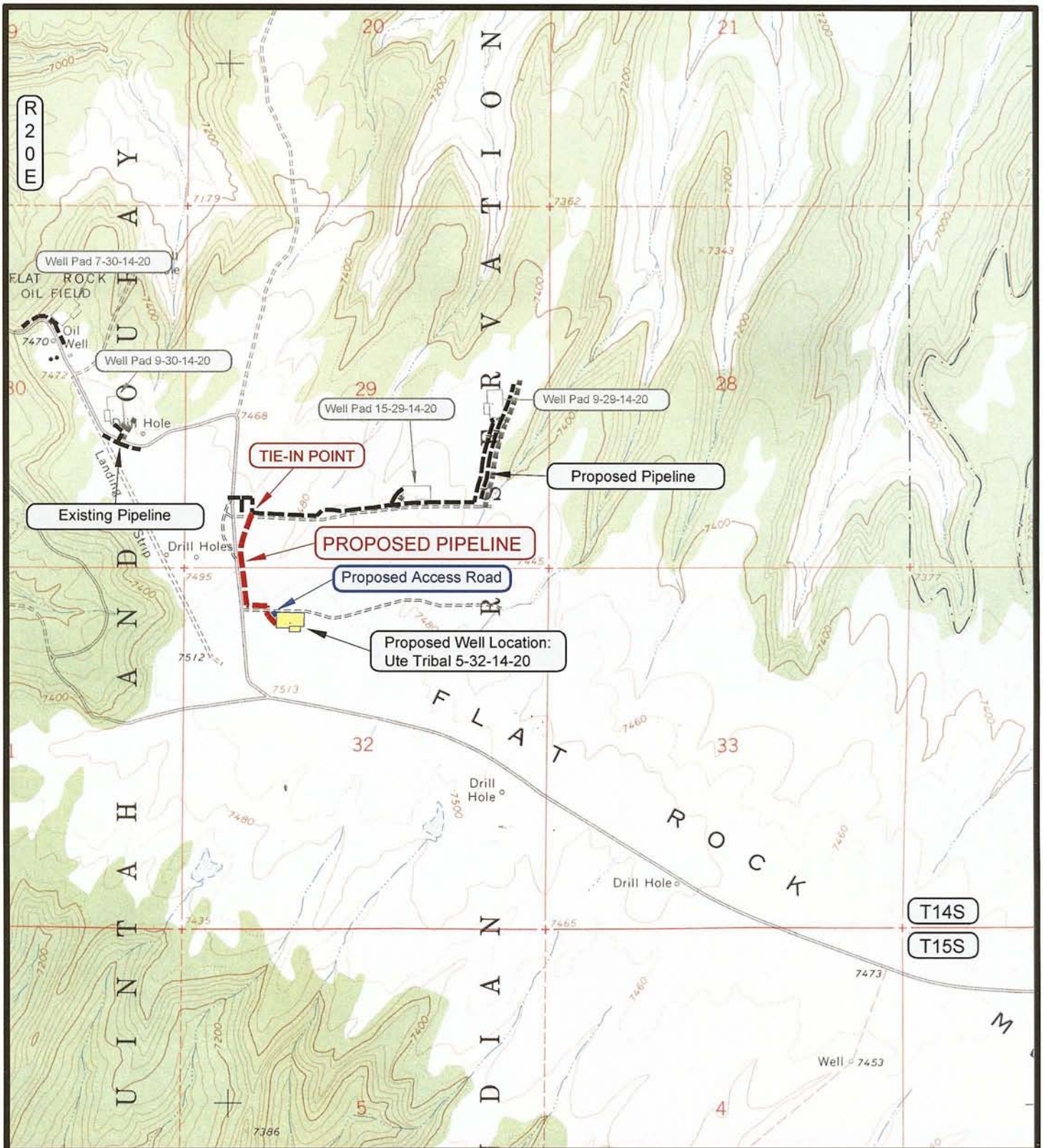
WHITING OIL AND GAS CORPORATION

Ute Tribal 5-32-14-20
SECTION 32, T14S, R20E, S.L.B.&M.
1980' FNL & 660' FWL (Bottom Hole)

TOPOGRAPHIC MAP "C"		DATE SURVEYED: 09-06-07
		DATE DRAWN: 09-24-07
SCALE: 1" = 2000'	DRAWN BY: M.W.W.	REVISED: 08-04-09

Timberline (435) 789-1365
Engineering & Land Surveying, Inc.
209 NORTH 300 WEST VERNAL, UTAH 84078

SHEET 10 OF 11



APPROXIMATE PIPELINE LENGTH = ±1,915 FEET

LEGEND

= PROPOSED PIPELINE
= OTHER PIPELINE
PROPOSED ACCESS ROAD
= SUBJECT WELL
= OTHER WELLS
= LEASE LINE AND / OR PROPERTY LINE

N

WHITING OIL AND GAS CORPORATION

Ute Tribal 5-32-14-20
SECTION 32, T14S, R20E, S.L.B.&M.
809' FNL & 1529' FWL (Surface)

TOPOGRAPHIC MAP "D"		DATE SURVEYED: 09-07-07
		DATE DRAWN: 09-26-07
SCALE: 1" = 2000'	DRAWN BY: M.W.W.	REVISED: 08-04-09

Timberline (435) 789-1365
Engineering & Land Surveying, Inc.
209 NORTH 300 WEST VERNAL, UTAH 84078

SHEET 11 OF 11

August 19, 2009

BAROID FLUID SERVICES

Drilling Fluid Recommendations

for

WHITING OIL & GAS CORP EBUSINESS

Ute Tribal 5-32-14-20
Ute Tribal
Uintah County, Utah
United States of America

Submitted by:
Joe Meier
Halliburton Energy Services
1125 17th Street Suite 1900
Denver , Colorado 80202
303-899-4751

August 10, 2009

HALLIBURTON

August 19, 2009

Halliburton appreciates the opportunity to present this proposal and looks forward to being of service to you.

Program Briefing

Enclosed is our recommended procedure for Drilling Fluid Services in the referenced well. The information in this proposal includes well data, calculations, material requirements, and cost estimates.

This proposal is based on information from our field personnel, customer information and previous services in the area.

Halliburton appreciates the opportunity to present this proposal for your consideration and we look forward to being of service to you. Our Services for your well will be coordinated through the Service Center listed below.

If you require any additional information or additional designs, please feel free to contact myself or our field representatives listed below.

Prepared and Submitted by: _____

Joe Meier
Technical Advisor

SERVICE CENTER:	Vernal, UT
SERVICE COORDINATOR:	John Khoury
OPER. ENGINEER:	
PHONE NUMBER:	435.219.1193

Well Summary

Well Data

Estimated Days on Well	21	Total Well Cost	
Maximum Density	9.50 ppg	Total Stock Point Cost	
Total Measured Depth	12038 ft	Total Fluids Cost	
True Vertical Depth	12038 ft	Total Charges Cost	
Maximum Deviation	20 DEG	Surface Solution Cost	
Max. Horz. Displacement		Engineer Services Cost	
Bottom Hole Temp	230 degF	Total Other Material Cost	
		Fluid Cost/Hole Drilled	
		Fluid Cost/Vol Drilled	
		Surface Solution Cost/Hole Drilled	
		Surface Solution Cost/Vol Drilled	

Casing Design

Description	Top MD (ft)	Top TVD (ft)	End MD (ft)	End TVD (ft)	CSG ID (in)	CSG OD (in)	Bit Size (in)	Hole MD (ft)	Hole TVD (ft)
Surface	0	0	500	500	12.715	13.375	17.500	500	500
Intermediate	0	0	4615	4615	8.921	9.625	12.250	4615	4615
Production	0	0	11676	11676	6.184	7.000	8.750	11676	11676

Fluid Program

Int #	Fluid Type	Interval Days	BHT (degF)	Max Density (ppg)	Whole Fluids + Mix Products	Other Material Charges	Other Charges	Total Interval Cost
Surface	Air	1		5				
Intermediate	AQUAGEL Spud Mud	7		8.60				
Production	KCl Polymer	11		9.50				
Open Hole Production	Aerated KCl Polymer	2	230	7.30				

Fluid Properties *Ute Tribal 5-32-14-20*

Air

Name		Min	Max	Name		Min	Max
Density	ppg	0	5				

AQUAGEL Spud Mud

Name		Min	Max	Name		Min	Max
Yield Point	lbf/100_ft2	0	12	Plastic Viscosity	cp	0	15
pH		7	8.50	Funnel Viscosity	sec/qt	28	38
API Filtrate	mL/30min	10.00	50.00	Density	ppg	8.40	8.60

KCl Polymer

Name		Min	Max	Name		Min	Max
Yield Point	lbf/100_ft2	5	15	Funnel Viscosity	sec/qt	35	45
Plastic Viscosity	cp	5	20	API Filtrate	mL/30min	5.00	8.00
Density	ppg	8.60	9.50	pH		8	9

Aerated KCl Polymer

Name		Min	Max	Name		Min	Max
Funnel Viscosity	sec/qt	35	45	Yield Point	lbf/100_ft2	5	15
pH		8	9	Plastic Viscosity	cp	5	20
API Filtrate	mL/30min	5.00	8.00	Density	ppg	7	7.30

Interval Summary

Surface	**Hole Size**	**17.50 in**

Interval Top MD/TVD	0 / 0 ft	Total Interval Cost	
Interval Bottom MD/TVD	500 / 500 ft	Other Material Cost	
Footage	500 ft	Total Fluids Cost	
Casing ID/OD	12.715 / 13.375 in	Total Charges Cost	
Casing Length	500 ft	Fluid Cost/Hole Drilled	
		Fluid Cost/Vol Drilled	
		Surface Solutions Cost/Hole Drilled	
		Surface Solutions Cost/Vol Drilled	

Washout %	0 %	Pit Volume	0 bbl
SCE	0 %	Dilution Volume	0 bbl
% Solids Retained (LGS)	0 %	Mud on Cuttings	0 %
Start Mud Weight	0 ppg	Maximum Deviation	0 DEG
End Mud Weight	0 ppg	Estimated BHT	0 degF
Carry Over Volume	0 bbl	Fluid Volume Required	148.75 bbl
Carry Over Weight	0 ppg	Weight Up Material Required	0 lbm

Ticket: 0	**Total**	**USD**

Interval Discussion *Surface*

The 17 1/2" surface interval to the 13 3/8" casing point is programmed to be drilled with an air, mist, foam, or aerated LSND fluid. Severe lost circulation is expected in this interval. It is desirable to drill with air, mist, or foam as long as the formation permits; to limit costs and drilling fluid losses. Only convert the drilling fluid to an aerated LSND fluid as a last resort for hole stability or to hold back water flows.

If it is determined that an aerated fluid is needed for hole stability, it should be formulated with 10-15 ppb AQUAGEL, 0.50-0.75 ppb EZ-MUD, 0.25-0.50 ppb PAC R, and 0.25-0.50 ppb of BARAZAN D. Add caustic soda to control the pH between 9.0 and 9.5.

Losses will be encountered during this interval while drilling. Fibrous lost circulation material such as sawdust or BAROSEAL may be added into the active system. Concentrations may get as high as 35% by volume. A polymeric LCM such as DIAMOND SEAL can be added down the drill pipe at 1-2 quarts per connection.

Upon reaching interval total depth, circulate the hole clean prior to running surface casing.

Interval Summary

Intermediate	**Hole Size**	**12.25 in**

Interval Top MD/TVD	500 / 500 ft	Total Interval Cost	
Interval Bottom MD/TVD	4615 / 4615 ft	Other Material Cost	
Footage	4115 ft	Total Fluids Cost	
Casing ID/OD	8.921 / 9.625 in	Total Charges Cost	
Casing Length	4615 ft	Fluid Cost/Hole Drilled	
		Fluid Cost/Vol Drilled	
		Surface Solutions Cost/Hole Drilled	
		Surface Solutions Cost/Vol Drilled	

Washout %	10 %	Pit Volume	800 bbl
SCE	95 %	Dilution Volume	659.86 bbl
% Solids Retained (LGS)	5 %	Mud on Cuttings	0 %
Start Mud Weight	8.40 ppg	Maximum Deviation	10 DEG
End Mud Weight	8.50 ppg	Estimated BHT	0 degF
Carry Over Volume	0 bbl	Fluid Volume Required	2198.24 bbl
Carry Over Weight	0 ppg	Weight Up Material Required	8501.23 lbm

Ticket: 0	**Total**	**USD**

Interval Discussion *Intermediate*

The 12 1/4" intermediate interval to the 9 5/8" casing point at 4,616' is programmed to be drilled with a conventional AQUAGEL spud mud paying particular attention to hole cleaning and maintaining fluid density as low as possible. Initially, the fluid can be formulated with 15 – 20 ppb AQUAGEL, lime, and EZ-MUD.

Alternatively, this interval can be spudded with air/ mist as the drilling fluid. As hole conditions require, mud up to the AQUAGEL system outlined in this section.

Additions of EZ-MUD made directly down the drill pipe on connections (2-3 gallons) will also aid in the hole cleaning process, provide additional inhibition and reduce the possibility of bit balling. The shale shakers should be closely monitored during this interval to assure proper hole cleaning.

High viscosity sweeps, 20-40 bbls, formulated with 15-20 ppb AQUAGEL and 0.50-0.75 ppb EZ-MUD should be circulated only as needed for hole cleaning purposes. Prior to making any trips trip out of the hole, 80 bbls of high viscosity AQUAGEL/ EZ-MUD sweep should be circulated.

Bit balling should not be an issue with the circulating rates and inhibition, but should the need arise; incorporate 10-15 ppb WALL-NUT in the above sweeps. Also, freshwater sweeps containing 2 ppb CON-DET will remove additional build-up from the bit.

Seepage losses may be encountered during this interval while drilling. Lost circulation material may be added to the high viscosity sweeps in the following concentrations: BARACARB 50 - 5 ppb, BARACARB 150 - 5 ppb, mica fine - 10 ppb, and BAROSEAL - 10 ppb. In the event of severe or complete losses, circulate or spot a 75 bbl pill containing 10-20 ppb BARACARB 150, 10-15 ppb mica fine, 20 ppb BAROSEAL. Discuss product concentrations and particle sizing with the Whiting drilling representative prior to circulating or spotting LCM pills.

Upon reaching interval total depth, circulate a 80 bbl high viscosity sweep and circulate the hole clean prior to running the surface casing.

Interval Summary

Production	**Hole Size**	**8.75 in**

Interval Top MD/TVD	4615 / 4615 ft	Total Interval Cost	
Interval Bottom MD/TVD	11676 / 11676 ft	Other Material Cost	
Footage	7061 ft	Total Fluids Cost	
Casing ID/OD	6.184 / 7.000 in	Total Charges Cost	
Casing Length	11676 ft	Fluid Cost/Hole Drilled	
		Fluid Cost/Vol Drilled	
		Surface Solutions Cost/Hole Drilled	
		Surface Solutions Cost/Vol Drilled	

Washout %	10 %	Pit Volume	800 bbl
SCE	92 %	Dilution Volume	924.30 bbl
% Solids Retained (LGS)	5 %	Mud on Cuttings	0 %
Start Mud Weight	8.50 ppg	Maximum Deviation	20 DEG
End Mud Weight	9.50 ppg	Estimated BHT	0 degF
Carry Over Volume	0 bbl	Fluid Volume Required	2658.77 bbl
Carry Over Weight	0 ppg	Weight Up Material Required	105770.78 lbm

Ticket: 0	**Total**	**USD**

Interval Discussion — *Production*

Upon drilling out of the intermediate shoe additions of 5-10 ppb AQUAGEL; 0.50-0.75 ppb EZ-MUD, 0.50-1.0 ppb PAC R, 0.50-1.0 ppb of BARAZAN D, and 10-12 ppb sack KCl should commence to achieve mud to a KCl polymer system. Maintain 3-5% KCl in the active system for wellbore stability. Add 4 ppb sack KCl for every 1% by weight increase in concentration. At 3%, the chloride concentration will be 14,500 mg/L.

Fluid properties will be maintained with YP and API filtration in the 5-15 lbs/ 100ft^2 and below 8 ml/ 30 min, respectively. EZ-MUD additions directly down the drill pipe for additional hole cleaning, inhibition and lubricity should continue during this portion of the interval.

Adjustments in fluid density will be made based on observed hole conditions. Closely monitor well bore conditions while drilling and following trips for any indications of increased pore pressure. Monitor annular hydraulics along with swab and surge pressures via DFG using latest drilling parameters.

The MBT and %LGS content should be closely monitored and maintained below 15.0 eppb and < 5%, respectively in order to limit the fluid density as low as possible to maximize penetration rates. Additions of BARAZAN D shall be made to keep the bentonite concentration of the fluid within the specified range. The finest screens possible should be run on the shakers and the de-silter and de-sander operated at the highest efficiency possible. Sand traps should be dumped regularly along with settling pits.

Seepage losses should be expected during this interval while drilling. Lost circulation material may be added to the high viscosity sweeps in the following concentrations: BARACARB 50 - 5 ppb, BARACARB 150 - 10 ppb, mica fine - 10 ppb, and BAROSEAL - 10 ppb. In the event of severe or complete losses, circulate or spot a 75 bbl pill containing 10-20 ppb BARACARB 150, 10-15 ppb mica fine, 20 ppb BAROSEAL. Discuss product concentrations and particle sizing with the Whiting drilling representative prior to circulating or spotting LCM pills.

Upon reaching total depth, condition and circulate the hole at least 2 bottoms up to prepare for logs and casing.

Interval Summary

Open Hole Production	**Hole Size**	**6.13 in**

Interval Top MD/TVD	11676 / 11676 ft	Total Interval Cost	
Interval Bottom MD/TVD	12038 / 12038 ft	Other Material Cost	
Footage	362 ft	Total Fluids Cost	
Casing ID/OD		Total Charges Cost	
Casing Length		Fluid Cost/Hole Drilled	
		Fluid Cost/Vol Drilled	
		Surface Solutions Cost/Hole Drilled	
		Surface Solutions Cost/Vol Drilled	

Washout %	10 %	Pit Volume	800 bbl
SCE	95 %	Dilution Volume	14.51 bbl
% Solids Retained (LGS)	5 %	Mud on Cuttings	0 %
Start Mud Weight	9.50 ppg	Maximum Deviation	20 DEG
End Mud Weight	9.50 ppg	Estimated BHT	230 degF
Carry Over Volume	1000 bbl	Fluid Volume Required	262.78 bbl
Carry Over Weight	9.60 ppg	Weight Up Material Required	0 lbm

Ticket: 0	**Total**	**USD**

Interval Discussion — *Open Hole Production*

This final production interval will use a KCl polymer system engineered the same fashion as the previous interval, but the fluid will be aerated to reduce hydrostatic pressure. This 6 1/8'' section will be drilled into the Entrada formation.

It is very critical that this interval is drilled at formation pressure or slightly underbalanced to minimize damage. The pressure gradient is expected to be 0.35 psi/ft. Since an air injection unit will be utilized, closely monitor wellbore conditions for possible signs of an influx.

Seepage losses should be expected during this interval while drilling with freshwater. Lost circulation material may be added to the high viscosity sweeps in the following concentrations: BARACARB 50 - 5 ppb, BARACARB 150 - 10 ppb, mica fine - 10 ppb, and BAROSEAL - 10 ppb. In the event of severe or complete losses, circulate or spot a 75 bbl pill containing 10-20 ppb BARACARB 150, 10-15 ppb mica fine, 20 ppb BAROSEAL. Discuss product concentrations and particle sizing with the Whiting drilling representative prior to circulating or spotting LCM pills.

Upon reaching total depth, circulate the hole and condition the drilling fluid for logging operations. A completion fluid may need to be prepared to leave in the wellbore since a final production string is not going to be run.

It will be desirable to reuse this KCl fluid from well to well. Before rigging down, shake out any LCM and prepare the fluid for storage. A treatment of biocide, such as ALDACIDE G, may be necessary to prevent degradation.

Proposal Cost

Total Proposal Cost			
Total Stock Point Cost			
Total Fluids Cost			
Total Charges Cost			
Total Surface Solutions Cost			
Total Engineering Charges			
Total Other Material Cost			

SAP Material	Product	Units	Unit Price	Extended Price
101252566	AQUAGEL	579		
201068	Caustic Soda	18		
201099	ZEOGEL	479		
201215	EZ-MUD	29		
201312	BARACARB 150	38		
201318	BA.PAC-L - 50 LB BAG	18		
201319	BA.PAC-R - 50 LB BAG	41		
201368	BA.POTASSIUM CHLORIDE - 50 LB BAG	638		
201403	SEA MUD - 50 LB BAG	54		
201420	BA.SAW DUST - 20 LB BAG	67		
201435	MICA FINE	83		
201666	BARO-TROL PLUS	0		
201864	BA.PALLET - EA	36		
201866	BA.SHRINK WRAP (OR STRCH) - EA	36		
210994	BA.DM TECH SERVICE/MUD CHECK - 1 EA	24		
211375	BA.TRANSPORTATION - 1 EA	6		
342065	BA.BARO-SEAL CLASSIC - 40 LB BAG	129		
478096	BAROID 41	1138		

Conditions

NOTE

The cost in this analysis is good for the materials and/or services outlined within. In order to meet your needs under this proposal with a high quality of service and responsive timing, Halliburton will be allocating limited resources and committing valuable equipment and materials to your area of operations. Accordingly, the discounts reflected in this proposal are available only for materials and services awarded on a first-call basis. Alternate pricing may apply in the event that Halliburton is awarded work on any basis other than as a first-call provider.

The unit prices stated in the proposal are based on our current published prices. The projected equipment, personnel, and material needs are only estimates based on information about the work presently available to us. At the time the work is actually performed, conditions then existing may require an increase or decrease in the equipment, personnel, and/or material needs. Charges will be based upon unit prices in effect at the time the work is performed and the amount of equipment, personnel, and/or material actually utilized in the work. Taxes, if any, are not included. Applicable taxes, if any, will be added to the actual invoice.

It is understood and agreed between the parties that with the exception of the subject discounts, all services performed and equipment and materials sold are provided subject to Halliburton's General Terms and Conditions contained in our current price list, (which include LIMITATION OF LIABILITY and WARRANTY provisions), and pursuant to the applicable Halliburton Work Order Contract (whether or not executed by you), unless a Master Service and/or Sales Contract applicable to the services, equipment, or materials supplied exists between your company and Halliburton, in which case the negotiated Master Contract shall govern the relationship between the parties. A copy of the latest version of our General Terms and Conditions is available from your Halliburton representative or at: http://www.halliburton.com/hes/general_terms_conditions.pdf for your convenient review, and we would appreciate receiving any questions you may have about them. Should your company be interested in negotiating a Master Contract with Halliburton, our Law Department would be pleased to work with you to finalize a mutually agreeable contract. In this connection, it is also understood and agreed that Customer will continue to execute Halliburton usual field work orders and/or tickets customarily required by Halliburton in connection with the furnishing of said services, equipment, and materials.
Any terms and conditions contained in purchase orders or other documents issued by the customer shall be of no effect except to confirm the type and quantity of services, equipment, and materials to be supplied to the customer.
If customer does not have an approved open account with Halliburton or a mutually executed written contract with Halliburton, which dictates payment terms different than those set forth in this clause, all sums due are payable in cash at the time of performance of services or delivery of equipment, products, or materials. If customer has an approved open account, invoices are payable on the twentieth day after date of invoice.

Customer agrees to pay interest on any unpaid balance from the date payable until paid at the highest lawful contract rate applicable, but never to exceed 18% per annum. In the event Halliburton employs an attorney for collection of any account, customer agrees to pay attorney fees of 20% of the unpaid account, plus all collection and court costs.

HALLIBURTON

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Ute Tribal 5-32-14-20
Flat Rock Field
Uintah County, Utah
United States of America
S:32 T:14S R:20E
API/UWI 43-047-39741-00

Multiple String Cement Recommendation

Prepared for: Mr. Dana Greathouse

August 9, 2009
Version: 1

Submitted by:
Matt Collins
Halliburton
1125 17th Street #1900
Denver, Colorado 80202
303.501.9557

Halliburton appreciates the opportunity to present this proposal and looks forward to being of service to you.

Foreword

Enclosed is our recommended procedure for cementing the casing strings in the referenced well. The information in this proposal includes well data, calculations, materials requirements, and cost estimates. This proposal is based on information from our field personnel and previous cementing services in the area.

Halliburton Energy Services recognizes the importance of meeting society's needs for health, safety, and protection of the environment. It is our intention to proactively work with employees, customers, the public, governments, and others to use natural resources in an environmentally sound manner while protecting the health, safety, and environmental processes while supplying high quality products and services to our customers.

We appreciate the opportunity to present this proposal for your consideration and we look forward to being of service to you. Our Services for your well will be coordinated through the Service Center listed below. If you require any additional information or additional designs, please feel free to contact myself or our field representative listed below.

Prepared and Submitted by:

Matt Collins
Technical Advisor

SERVICE CENTER:	Vernal
SERVICE COORDINATOR:	Weston Spencer / Cody Slaugh
PSL DISTRICT MANAGER:	Christopher Jerez
PDC:	Jason Bergin / Corey Reynolds
CMT ENGINEERS:	Chris Cicirello / Sean Bullington
	Ted Groff
PHONE NUMBER:	435.789.2550

Cementing Best Practices

1. Cement quality and weight: You must choose a cement slurry that is designed to solve the problems specific to each casing string.

2. Waiting time: You must hold the cement slurry in place and under pressure until it reaches its' initial set without disturbing it. A cement slurry is a time-dependent liquid and must be allowed to undergo a hydration reaction to produce a competent cement sheath. A fresh cement slurry can be worked (thickening or pump time) as long as it is in a plastic state and before going through its' transition phase. If the cement slurry is not allowed to transition without being disturbed, it may be subjected to changes in density, dilution, settling, water separation, and gas cutting that may lead to a lack of zonal isolation and possible bridging in the annulus.

3. Pipe movement: Pipe movement may be one of the single most influential factors in mud removal. Reciprocation and/or rotation mechanically breaks up gelled mud and changes the flow patterns in the annulus to improve displacement efficiency.

4. Mud properties (for cementing):

Rheology:

Plastic Viscosity (PV) < 15 centipoise (cp)
Yield Point (YP) < 10 lb/100 ft2
These properties should be reviewed with the Mud Engineer, Drilling Engineer, and Company Representative(s) to ensure no hole problems are created.

Gel Strength:

The 10-second/10-minute gel strength values should be such that the 10-second and 10-minute readings are close together or flat (i.e., 5/6). The 30-minute reading should be less than 20 lb/100 ft^2. Sufficient shear stress may not be achieved on a primary cement job to remove mud left in the hole if the mud were to develop more than 25 lb/100 ft^2 of gel strength.

Fluid Loss:

Decreasing the filtrate loss into a permeable zone enhances the creation of a thin, competent filter cake. A thin, competent filter cake created by a low fluid loss mud system is desirable over a thick, partially gelled filter cake. A mud system created with a low fluid loss will be more easily displaced. The fluid loss value should be < 15 cc's (ideal would be 5 cc's).

5. Circulation: Prior to cementing circulate full hole volume twice, or until well conditioned mud is being returned to the surface. There should be no cutting in the mud returns. An annular velocity of 260 feet per minute is optimum (SPE/IADC 18617), if possible.

6. Flow rate: Turbulent flow is the most desirable flow regime for mud removal. If turbulence cannot be achieved pump at as high a flow rate that can practically and safely be used to create the maximum flow energy. The highest mud removal is achieved when the maximum flow energy is obtained.

7. Pipe Centralization: This Cement will take the path of least resistance, therefore proper centralization is important to help prevent the casing from contacting the borehole wall. A minimum standoff of 70% should be targeted for optimum displacement efficiency.

8. Rat hole: A weighted viscous pill placed in the rat hole prior to cementing will minimize the risk of higher density cement mixing with lower density mud when the well is static.

9. Top and Bottom plugs: A top and bottom plug are recommended to be run on all primary casing jobs. The bottom plug should be run after the spacer and ahead of the first cement slurry.

10. Spacers and flushes: Spacers and/or flushes should be used to prevent contamination between the cement slurry and the drilling fluid. They are also used to clean the wellbore and aid with bonding. To determine the volume, either a minimum of 10 minutes contact time or 1000 ft. of annular fill, whichever is greater, is recommended.

Job Information *13 3/8" Casing*

Well Name: Ute Tribal Well #: 5-32-14-20

20" Conductor	0 - 80 ft (MD)
Outer Diameter	20.000 in
Inner Diameter	19.124 in
Linear Weight	94 lbm/ft
Casing Grade	H-40
17 1/2" Open Hole	80 - 500 ft (MD)
Inner Diameter	17.500 in
Job Excess	100 %
13 3/8" Surface Casing	0 - 500 ft (MD)
Outer Diameter	13.375 in
Inner Diameter	12.715 in
Linear Weight	48 lbm/ft
Casing Grade	H-40

Calculations *13 3/8" Casing*

Spacer:

Total Spacer	= 112.29 ft^3
	= 20.00 bbl

Cement : (500.00 ft fill)

80.00 ft * 1.019 ft^3/ft * 0 %	= 81.52 ft^3
420.00 ft * 0.6946 ft^3/ft * 100 %	= 583.50 ft^3
Lead Cement	= 665.02 ft^3
	= 118.44 bbl

Shoe Joint Volume: (40.00 ft fill)

40.00 ft * 0.8818 ft^3/ft	= 35.27 ft^3
	= 6.28 bbl
Tail plus shoe joint	= 700.29 ft^3
	= 124.73 bbl
Total Tail	= 389 sks

Total Pipe Capacity:

500.00 ft * 0.8818 ft^3/ft	= 440.89 ft^3
	= 78.53 bbl

Displacement Volume to Shoe Joint:

Capacity of Pipe - Shoe Joint	= 78.53 bbl - 6.28 bbl
	= 72.24 bbl

Fluid Instructions

Fluid 1: Water Spacer

Gel Water

Fluid Density:	8.34 lbm/gal
Fluid Volume:	20 bbl

Fluid 2: Lead Cement

Rockies LT

0.25 lbm/sk Kwik Seal (Lost Circulation Additive)

0.125 lbm/sk Poly-E-Flake (Lost Circulation Additive)

Fluid Weight	13.50 lbm/gal
Slurry Yield:	1.80 ft^3/sk
Total Mixing Fluid:	9.33 Gal/sk
Top of Fluid:	0 ft
Calculated Fill:	500 ft
Volume:	124.73 bbl
Calculated Sacks:	389.05 sks
Proposed Sacks:	390 sks

Fluid 3: Water Spacer

Water Displacement

Fluid Density:	8.34 lbm/gal
Fluid Volume:	72.24 bbl

Fluid 4: Top Out Cement

Premium Plus - Type III

94 lbm/sk Premium Plus - Type III (Cement-non-api)

2 % Calcium Chloride (Accelerator)

Fluid Weight	14.50 lbm/gal
Slurry Yield:	1.41 ft^3/sk
Total Mixing Fluid:	6.86 Gal/sk
Proposed Sacks:	200 sks

Detailed Pumping Schedule

Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Estimated Avg Rate bbl/min	Downhole Volume
1	Spacer	Gel Water	8.3		20 bbl
2	Cement	Primary Cement	13.5		390 sks
3	Spacer	Water Displacement	8.3		72.24 bbl
4	Cement	Top Out Cement	14.5		200 sks

Job Information *9 5/8" Casing*

Well Name: Ute Tribal Well #: 5-32-14-20

13 3/8" Surface Casing	0 - 500 ft (MD)
Outer Diameter	13.375 in
Inner Diameter	12.715 in
Linear Weight	48 lbm/ft
Casing Grade	H-40
12 1/4" Open Hole	500 - 4615 ft (MD)
Inner Diameter	12.250 in
Job Excess	75 %
9 5/8" Intermediate Casing	0 - 4615 ft (MD)
Outer Diameter	9.625 in
Inner Diameter	8.921 in
Linear Weight	36 lbm/ft
Casing Grade	J-55

Spacer:

Total Spacer	= 112.29 ft^3
	= 20.00 bbl

Spacer:

2.00 ft * 0.3765 ft^3/ft * 0 %	= 0.75 ft^3
Total Spacer	= 224.58 ft^3
	= 40.00 bbl

Spacer:

298.00 ft * 0.3765 ft^3/ft * 0 %	= 112.20 ft^3
Total Spacer	= 112.29 ft^3
	= 20.00 bbl

Cement : (3815.00 ft fill)

200.00 ft * 0.3765 ft^3/ft * 0 %	= 75.30 ft^3
3615.00 ft * 0.3132 ft^3/ft * 75 %	= 1981.30 ft^3
Total Lead Cement	= 2056.60 ft^3
	= 366.30 bbl
Sacks of Cement	= 539 sks

Cement : (500.00 ft fill)

500.00 ft * 0.3132 ft^3/ft * 75 %	= 274.04 ft^3
Tail Cement	= 274.04 ft^3
	= 48.81 bbl

Shoe Joint Volume: (40.00 ft fill)

40.00 ft * 0.4341 ft^3/ft	= 17.36 ft^3
	= 3.09 bbl
Tail plus shoe joint	= 291.40 ft^3
	= 51.90 bbl
Total Tail	= 253 sks

Total Pipe Capacity:

4615.00 ft * 0.4341 ft^3/ft	= 2003.21 ft^3
	= 356.79 bbl

Displacement Volume to Shoe Joint:

Capacity of Pipe - Shoe Joint	= 356.79 bbl - 3.09 bbl
	= 353.69 bbl

Fluid Instructions

Fluid 1: Water Spacer

Fresh Water

Fluid Density:	8.34 lbm/gal
Fluid Volume:	20 bbl

Fluid 2: Reactive Spacer

SUPER FLUSH 101

Fluid Density:	10 lbm/gal
Fluid Volume:	40 bbl

Fluid 3: Water Spacer

Fresh Water

Fluid Density:	8.34 lbm/gal
Fluid Volume:	20 bbl

Fluid 4: Lead Cement

ECONOCEM (TM) SYSTEM

0.125 lbm/sk Poly-E-Flake (Lost Circulation Additive)

Fluid Weight	11 lbm/gal
Slurry Yield:	3.81 ft^3/sk
Total Mixing Fluid:	23.01 Gal/sk
Top of Fluid:	300 ft
Calculated Fill:	3815 ft
Volume:	366.30 bbl
Calculated Sacks:	539.22 sks
Proposed Sacks:	540 sks

Fluid 5: Tail Cement

Premium Cement

94 lbm/sk Premium Cement (Cement)

0.3 % Halad(R)-344 (Low Fluid Loss Control)

0.25 % CFR-3 (Dispersant)

0.35 % HR-5 (Retarder)

0.2 % Super CBL (Gas Migration Control)

Fluid Weight	15.80 lbm/gal
Slurry Yield:	1.15 ft^3/sk
Total Mixing Fluid:	4.94 Gal/sk
Top of Fluid:	4115 ft
Calculated Fill:	500 ft
Volume:	51.90 bbl
Calculated Sacks:	252.95 sks
Proposed Sacks:	255 sks

Fluid 6: Mud

Mud Displacement

Fluid Density:	10 lbm/gal
Fluid Volume	353.69 bbl

Detailed Pumping Schedule

Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Estimated Avg Rate bbl/min	Downhole Volume
1	Spacer	Fresh Water	8.3		20 bbl
2	Spacer	SUPER FLUSH 101	10.0		40 bbl
3	Spacer	Fresh Water	8.3		20 bbl
4	Cement	EconoCem V3	11.0		540 sks
5	Cement	Premium Cement	15.8		255 sks
6	Mud	Mud Displacement	10.0		353.69 bbl

Job Information *7" Casing*

Well Name: Ute Tribal	Well #: 5-32-14-20
9 5/8" Intermediate Casing	0 - 4615 ft (MD)
Outer Diameter	9.625 in
Inner Diameter	8.921 in
Linear Weight	36 lbm/ft
Casing Grade	J-55
8 3/4" Open Hole	4615 - 11676 ft (MD)
Inner Diameter	8.750 in
Job Excess	40 %
7" Production Casing	0 - 11676 ft (MD)
Outer Diameter	7.000 in
Inner Diameter	6.184 in
Linear Weight	29 lbm/ft
Casing Grade	L-80

Calculations *7" Casing*

Spacer:

337.00 ft * 0.1668 ft^3/ft * 0 %	= 56.22 ft^3
Total Spacer	= 56.15 ft^3
	= 10.00 bbl

Spacer:

673.00 ft * 0.1668 ft^3/ft * 0 %	= 112.26 ft^3
Total Spacer	= 112.29 ft^3
	= 20.00 bbl

Spacer:

337.00 ft * 0.1668 ft^3/ft * 0 %	= 56.22 ft^3
Total Spacer	= 56.15 ft^3
	= 10.00 bbl

Cement : (5017.00 ft fill)

200.00 ft * 0.1668 ft^3/ft * 0 %	= 33.36 ft^3
4817.00 ft * 0.1503 ft^3/ft * 40 %	= 1013.80 ft^3
Total Foamed Lead Cement	= 1047.16 ft^3
	= 186.51 bbl
Sacks of Cement	= 523 sks

Cement : (2244.00 ft fill)

2244.00 ft * 0.1503 ft^3/ft * 40 %	= 472.28 ft^3
Tail Cement	= 472.28 ft^3
	= 84.12 bbl

Shoe Joint Volume: (40.00 ft fill)

40.00 ft * 0.2086 ft^3/ft	= 8.34 ft^3
	= 1.49 bbl
Tail plus shoe joint	= 480.62 ft^3
	= 85.60 bbl
Total Tail	= 327 sks

Total Pipe Capacity:

11676.00 ft * 0.2086 ft^3/ft	= 2435.34 ft^3
	= 433.75 bbl

Displacement Volume to Shoe Joint:

Capacity of Pipe - Shoe Joint	= 433.75 bbl - 1.49 bbl
	= 432.27 bbl

Fluid Instructions

Fluid 1: Water Spacer
Fresh Water

Fluid Density:	8.34 lbm/gal
Fluid Volume:	10 bbl

Fluid 2: Reactive Spacer
SUPER FLUSH

Fluid Density:	10 lbm/gal
Fluid Volume:	20 bbl

Fluid 3: Water Spacer
Fresh Water

Fluid Density:	8.34 lbm/gal
Fluid Volume:	10 bbl

Fluid 4: Foamed Lead Cement
ELASTISEAL (TM) SYSTEM
1.5 % FDP-C760-04 (Foamer)

Fluid Weight	14.30 lbm/gal
Slurry Yield:	1.47 ft^3/sk
Total Mixing Fluid:	6.41 Gal/sk
Top of Fluid:	4415 ft
Calculated Fill:	5017 ft
Volume:	186.51 bbl
Calculated Sacks:	523.06 sks
Proposed Sacks:	525 sks

Fluid 5: Tail Cement
ELASTICEM (TM) SYSTEM

Fluid Weight	14.30 lbm/gal
Slurry Yield:	1.47 ft^3/sk
Total Mixing Fluid:	6.40 Gal/sk
Top of Fluid:	9432 ft
Calculated Fill:	2244 ft
Volume:	85.60 bbl
Calculated Sacks:	327.17 sks
Proposed Sacks:	330 sks

Fluid 6: Water Spacer
Displacement

Fluid Density:	8.34 lbm/gal
Fluid Volume:	432.27 bbl

Fluid 7: Top Out Cement
Premium Cement
94 lbm/sk Premium Cement (Cement)
12 % Cal-Seal 60 (Accelerator)
3 % Calcium Chloride (Accelerator)

Fluid Weight	14.60 lbm/gal
Slurry Yield:	1.55 ft^3/sk
Total Mixing Fluid:	7.35 Gal/sk
Proposed Sacks:	200 sks

Detailed Pumping Schedule

Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Estimated Avg Rate bbl/min	Downhole Volume
1	Spacer	Fresh Water	8.3		10 bbl
2	Spacer	SUPER FLUSH	10.0		20 bbl
3	Spacer	Fresh Water	8.3		10 bbl
4	Cement	ELASTISEAL SYSTEM	14.3		525 sks
5	Cement	ELASTISEAL SYSTEM	14.3		330 sks
6	Spacer	Displacement	8.3		432.27 bbl
7	Cement	Cap Cement	14.6		200 sks

Foam Output Parameter Summary:

Fluid #	Fluid Name	Unfoamed Liquid Volume	Beginning Density lbm/gal	Ending Density lbm/gal	Beginning Rate scf/bbl	Ending Rate scf/bbl
Stage 1						
4	ELASTISEAL SYSTEM	136.95bbl	11.0	11.0	236.2	531.6

Foam Design Specifications:

Foam Calculation Method: Constant Density
Backpressure: 75 psig
Bottom Hole Circulating Temp: 180 degF
Mud Outlet Temperature: 120 degF

Calculated Gas = 53177.0 scf
Additional Gas = 40000 scf
Total Gas = 93177.0 scf

Conditions

NOTE

The cost in this analysis is good for the materials and/or services outlined within and shall be valid for 30 days from the date of this proposal. In order to meet your needs under this proposal with a high quality of service and responsive timing, Halliburton will be allocating limited resources and committing valuable equipment and materials to your area of operations. Accordingly, the discounts reflected in this proposal are available only for materials and services awarded on a first-call basis. Alternate pricing may apply in the event that Halliburton is awarded work on any basis other than as a first-call provider.

The unit prices stated in the proposal are based on our current published prices. The projected equipment, personnel, and material needs are only estimates based on information about the work presently available to us. At the time the work is actually performed, conditions then existing may require an increase or decrease in the equipment, personnel, and/or material needs. Charges will be based upon unit prices in effect at the time the work is performed and the amount of equipment, personnel, and/or material actually utilized in the work. Taxes, if any, are not included. Applicable taxes, if any, will be added to the actual invoice.

It is understood and agreed between the parties that with the exception of the subject discounts, all services performed and equipment and materials sold are provided subject to Halliburton's General Terms and Conditions contained in our current price list, (which include LIMITATION OF LIABILITY and WARRANTY provisions), and pursuant to the applicable Halliburton Work Order Contract (whether or not executed by you), unless a Master Service and/or Sales Contract applicable to the services, equipment, or materials supplied exists between your company and Halliburton, in which case the negotiated Master Contract shall govern the relationship between the parties. A copy of the latest version of our General Terms and Conditions is available from your Halliburton representative or at: http://www.halliburton.com/hes/general_terms_conditions.pdf for your convenient review, and we would appreciate receiving any questions you may have about them. Should your company be interested in negotiating a Master Contract with Halliburton, our Law Department would be pleased to work with you to finalize a mutually agreeable contract. In this connection, it is also understood and agreed that Customer will continue to execute Halliburton usual field work orders and/or tickets customarily required by Halliburton in connection with the furnishing of said services, equipment, and materials.
Any terms and conditions contained in purchase orders or other documents issued by the customer shall be of no effect except to confirm the type and quantity of services, equipment, and materials to be supplied to the customer.
If customer does not have an approved open account with Halliburton or a mutually executed written contract with Halliburton, which dictates payment terms different than those set forth in this clause, all sums due are payable in cash at the time of performance of services or delivery of equipment, products, or materials. If customer has an approved open account, invoices are payable on the twentieth day after date of invoice.

Customer agrees to pay interest on any unpaid balance from the date payable until paid at the highest lawful contract rate applicable, but never to exceed 18% per annum. In the event Halliburton employs an attorney for collection of any account, customer agrees to pay attorney fees of 20% of the unpaid account, plus all collection and court costs.

API Well No: 43047397410000

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: ML-44317

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.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: UTE TRIBAL 5-32-14-20

2. NAME OF OPERATOR: WHITING OIL & GAS CORPORATION

9. API NUMBER: 43047397410000

3. ADDRESS OF OPERATOR: 1700 Broadway, Suite 2300 , Denver, CO, 80290 2300

PHONE NUMBER: 303 390-4095 Ext

9. FIELD and POOL or WILDCAT: FLAT ROCK

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0809 FNL 1529 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 32 Township: 14.0S Range: 20.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 11/1/2009	☐ ACIDIZE	✓ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DRILLING REPORT Report Date:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

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

Whiting Oil and Gas is requesting to change this well from a high angle openhole completion to an S-curve directional in the Wingate formation. This will cause a change in the casing size which is addressed in the attached drilling plan. There is NO change to the SHL or BHL, both of which will stay the same. Attached please find revised Drilling Plans, Directional Drilling Plans, and a Multiple String Cement Recommendation.

Approved by the Utah Division of Oil, Gas and Mining

Date: October 19, 2009

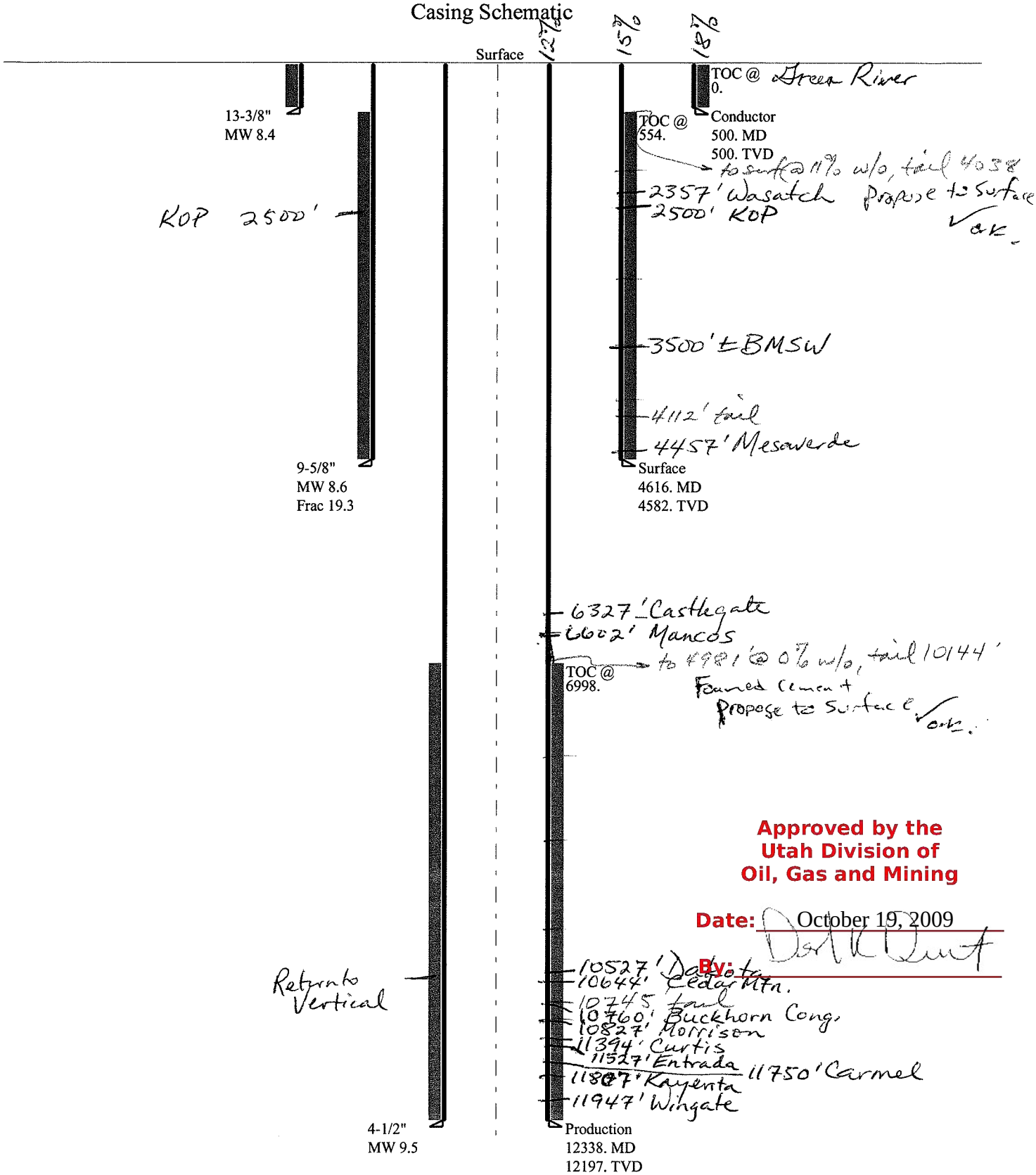
By:

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Terri Hartle	435 896-5501	Admin/Regulatory (Western Land Services)
SIGNATURE N/A		**DATE** 10/14/2009

RECEIVED October 14, 2009

43047397410000 Ute Tribal 5-32-14-20rev

Casing Schematic



Well name:	**43047397410000 Ute Tribal 5-32-14-20rev**
Operator:	**Whiting Oil and Gas**
String type:	Conductor
Project ID:	43-047-39741-0000
Location:	Uintah County

Design parameters:

Collapse

Mud weight: 8.400 ppg
Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 158 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 218 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 buoyed weight.
Neutral point: 439 ft

Environment:

H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 82 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 300 ft

Cement top: Surface

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	500	13.375	48.00	H-40	ST&C	500	500	12.59	440.9

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	218	740	3.392	218	1730	7.93	21	322	15.30 J

Approved by the Utah Division of Oil, Gas and Mining

Date: October 19, 2009

By:

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Mining
Phone: 801-538-5357
FAX: 801-359-3940
Date: October 19,2009
Salt Lake City, Utah

formerly 2007-11 Miller Dyer Ute Tribal 3-
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.
Collapse is based on a vertical depth of 500 ft, a mud weight of 8.4 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:	**43047397410000 Ute Tribal 5-32-14-20rev**
Operator:	**Whiting Oil and Gas**
String type:	Surface
Project ID:	43-047-39741-0000
Location:	Uintah County

Design parameters:

Collapse

Mud weight:	8.600 ppg
Internal fluid density:	1.500 ppg

Burst

Max anticipated surface pressure:	2,766 psi
Internal gradient:	0.220 psi/ft
Calculated BHP	3,774 psi
Annular backup:	1.00 ppg

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 buoyed weight.
Neutral point: 4,021 ft

Environment:

H2S considered?	No
Surface temperature:	75 °F
Bottom hole temperature:	139 °F
Temperature gradient:	1.40 °F/100ft
Minimum section length:	300 ft
Cement top:	554 ft

Directional well information:

Kick-off point	2500 ft
Departure at shoe:	362 ft
Maximum dogleg:	2 °/100ft
Inclination at shoe:	11.38 °

Re subsequent strings:

Next setting depth:	12,197 ft
Next mud weight:	8.600 ppg
Next setting BHP:	5,449 psi
Fracture mud wt:	19.250 ppg
Fracture depth:	4,582 ft
Injection pressure:	4,582 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	4616	9.625	36.00	J-55	LT&C	4582	4616	8.796	2003.6

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	1690	2020	1.195	3536	3520	1.00	144	453	3.15 J

Approved by the Utah Division of Oil, Gas and Mining

Date: October 19, 2009

By: Dustin Doucet

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

Phone: 801-538-5357
FAX: 801-359-3940

Date: October 19,2009
Salt Lake City, Utah

formerly 2007-11 Miller Dyer Ute Tribal 3-
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.
Collapse is based on a vertical depth of 4582 ft, a mud weight of 8.6 ppg An internal gradient of .078 psi/ft was used for collapse from TD to
Burst strength is not adjusted for tension.
Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

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

Well name:	**43047397410000 Ute Tribal 5-32-14-20rev**
Operator:	**Whiting Oil and Gas**
String type:	Production
Project ID:	43-047-39741-0000
Location:	Uintah County

Design parameters:

Collapse
Mud weight: 9.500 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 3,336 psi
Internal gradient: 0.220 psi/ft
Calculated BHP 6,019 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 buoyed weight.
Neutral point: 10,606 ft

Environment:
H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 246 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 1,500 ft

Cement top: 6,998 ft

Directional Info - Build & Drop
Kick-off point 2500 ft
Departure at shoe: 1462 ft
Maximum dogleg: 2 °/100ft
Inclination at shoe: 0 °

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	12338	4.5	11.60	P-110	LT&C	12197	12338	3.875	1076.7

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	6019	7580	1.259	6019	10690	1.78	121	279	2.30 J

Approved by the Utah Division of Oil, Gas and Mining

Date: October 19, 2009

By: Dustin Doucet

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Mining
Phone: 801-538-5357
FAX: 801-359-3940
Date: October 19,2009
Salt Lake City, Utah

formerly 2007-11 Miller Dyer Ute Tribal 3-
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.
Collapse is based on a vertical depth of 12197 ft, a mud weight of 9.5 ppg The casing is considered to be evacuated for collapse purposes.
Burst strength is not adjusted for tension.
Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

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

BOPE REVIEW — Whiting Ute Tribal 5-32-14-20rev 43-047-39741-0000

Well Name	Whiting Ute Tribal 5-32-14-20rev 43-047-39741-0000			
	String 1	String 2	String 3	
Casing Size (")	13 3/8	9 5/8	4 1/2	
Setting Depth (TVD)	500	4582	12197	
Previous Shoe Setting Depth (TVD)	60	500	4582	
Max Mud Weight (ppg)	8.4	8.6	9.5	
BOPE Proposed (psi)	500	5000	5000	
Casing Internal Yield (psi)	1730	3520	10690	
Operators Max Anticipated Pressure (psi) @TD 4269 psi	4933	@11394' Curtis Fm	7.8	ppg

Calculations	String 1	13 3/8 "		
Max BHP [psi]	.052*Setting Depth*MW =	218		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	158	YES ✓	Air Drill
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	108	YES	
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth) =	122	NO OK	
Required Casing/BOPE Test Pressure		500	psi	
*Max Pressure Allowed @ Previous Casing Shoe =		60	psi	*Assumes 1psi/ft frac gradient

Calculations	String 2	9 5/8 "		
Max BHP [psi]	.052*Setting Depth*MW =	2049		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	1499	YES	
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	1041	YES ✓	
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth) =	1151	NO O.K.	
Required Casing/BOPE Test Pressure		2464	psi	
*Max Pressure Allowed @ Previous Casing Shoe =		500	psi ✓	*Assumes 1psi/ft frac gradient

Calculations	String 3	4 1/2 "		
Max BHP [psi]	.052*Setting Depth*MW =	6025		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	4562	YES	
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	3342	YES OK	
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth) =	4350	YES O.K.	
Required Casing/BOPE Test Pressure		5000	psi	
*Max Pressure Allowed @ Previous Casing Shoe =		3520	psi	*Assumes 1psi/ft frac gradient

Approved by the Utah Division of Oil, Gas and Mining

Date: October 19, 2009

By:

Whiting Oil & Gas Corp.
Ute Tribal 5-32-14-20 Well Plan
Directional Wingate well
Change Target, TD and Casing Design

Surface Location: NENW 32-T14S-R20E SLB&M
809' FNL & 1529' FWL
Uintah County, Utah

SUMMARY:

Whiting Oil & Gas Corp. is requesting a change in the well design for the Ute Tribal 5-32-14-20 from a high angle openhole completion in the Entrada formation, to a S Curve directional well to the Wingate formation. The SHL and BHL will not change as per the last sundry, only the well path will change. A new directional plan is attached. The TD depth will be in the Wingate as per the original permit. This change is the result of re-evaluation of the geological data since the permit was originally filed.

The well will be an S Curve directional well with kickoff in the Wastch formation and drop in the Mancos B. The well will be back to vertical at the top of the Dakota and remain vertical to TD.

DRILLING PROGRAM

1. ESTIMATED TOPS OF GEOLOGICAL MARKERS:

Ground Level 7,499' Estimated KB 7,527' (28')

Formation	TVD	Lithology	Hazard
Green River	28'	Oil Shale	Oil/Gas
Wasatch	2,357'	SS-SH	Oil/Gas
Mesaverde	4,457'	SS-SH	Oil
Castlegate SS	6,327'	Sandstone	Gas
Mancos	6,602'	SS-SH	Gas
Dakota	10,527'	Sandstone	Gas
Cedar Mtn	10,644'	Sandstone	Gas
Buckhorn Congl	10,760'	SS-SH	Gas
Morrison	10,827'	SS-SH	Gas
Curtis	11,394'	SS-SH	Gas
Entrada	11,527'	Sandstone	Gas
Carmel	11,750'	LS-SH	
Kayenta	11,807'	Sandstone	Gas
Wingate	11,947'	Sandstone	Gas
Total Depth	12,197'		

Bottom Hole Location: SWNW 32-T14S-R20E SLB&M
1980' FSL & 660' FWL
Uintah County, Utah

*See Attached Directional Well Plan

2. PRESSURE CONTROL EQUIPMENT

A. Type: 11” 5000 psi annular preventer
11” 5000 psi double ram hydraulic BOP
1 – Blind Ram
1 - Pipe Ram
Drilling Spool
Kill lines will be 2” x 5,000 psi working pressure
Choke lines will be 3” x 5,000 psi working pressure
5,000 psi Casing head

B. Testing Procedure:

The annular preventer will be pressure tested to 50% of stack rated working pressure for ten (10) minutes or until provisions of test are met, whichever is longer. The BOP, choke manifold, and related equipment will be pressure tested to approved BOP stack working pressure (if isolated from surface casing by a test plug) or to 70% of surface casing internal yield strength (if BOP is not isolated by a test plug). Pressure will be maintained for ten (10) minutes or until the requirements of the test are met, whichever is longer. At a minimum, the Annular and Blow-Out Preventer pressure tests will be performed:

1. When the BOPE is initially installed;
2. Whenever any seal subject to test pressure is broken;
3. Following related repairs; and
4. At thirty (30) day intervals.

Annular will be function tested weekly, and pipe & blind rams activated each trip, but not more than once per day. All BOP drills & tests will be recorded in IADC driller's log.

C. Choke Manifold Equipment:

All choke lines will be straight lines whenever possible at turns, tee blocks will be used or will be targeted with running tees, and will be anchored to prevent whip and vibration.

D. Accumulator:

Accumulator will have sufficient capacity to open hydraulically-controlled choke line valve (if so equipped), close all rams plus annular preventer, and retain a minimum of 200 psi above precharge on the closing manifold without the use of closing unit pumps. The fluid reservoir capacity will be double accumulator capacity and the fluid level will be maintained at manufacturer's recommendations. Accumulator precharge pressure test will be conducted prior to connecting the closing unit to the BOP stack.

E. Miscellaneous Information:

Choke manifold and BOP extension rods with hand wheels will be located outside rig sub-structure. Hydraulic BOP closing unit will be located at least twenty-five (25) feet from the wellhead but readily accessible to the driller. Exact locations and configurations of the hydraulic BOP closing unit will depend upon the particular rig contracted to drill this hole.
A flare line will be installed after the choke manifold with the discharge point of the flare line to a separate pit located at least 125 feet away from the wellbore and any existing production facilities.

3. PROPOSED CASING PROGRAM

Hole Size	Setting Depth (MD)	Casing Size	Wt./Ft.	Grade	Thread
17-1/2"	500'	13-3/8"	48.00	H-40	STC
12-1/4"	4,616'	9-5/8"	36.00	J-55	LTC
7-7/8"	12,338'	4-1/2"	11.60	P-110	LTC

4. PROPOSED CEMENTING PROGRAM

SURFACE 500' MD: TOC Surface (100% Excess)

Single Stage (Includes Top Out): 389 sacks, Rockies LT

Cement Properties	Slurry
Slurry Weight (ppg)	13.5
Slurry Yield (cf/sack)	1.80

INTERMEDIATE 4,616' MD: TOC Surface (75% Excess, TOT: 4100' MD, TOL: 200' into surface casing)

Lead: 539 sacks Halliburton ECONOCEM SYSTEM

Tail: 253 sacks Halliburton Premium Cement

Cement Properties	Lead Slurry	Tail Slurry
Slurry Weight (ppg)	11.0	15.8
Slurry Yield (cf/sack)	3.81	1.15

PRODUCTION 12,338' MD: TOC Surface (Capiler + 15% Excess, TOT: 10,450' MD above the Dakota Silt, TOL: 200' into 9-5/8" casing)

Lead: 800 sacks Halliburton Foamed Lead Cement Elastiseal System

Tail: 340 sacks Halliburton Elastiseal System

Cement Properties	Lead Slurry	Tail Slurry
Slurry Weight (ppg)	14.30	14.30
Slurry Yield (cf/sack)	1.47	1.47

Foam Design Specifications:

Foam Calculation Method: Constant Density
Backpressure: 75 psig
Bottom Hole Circulating Temp: 180 degF
Mud Outlet Temperature: 120 degF

Calculated Gas = 86691.0 scf
Additional Gas = 40000 scf
Total Gas = 126691.0 scf

.

5. MUD PROGRAM

Depth (MD)	Mud System	MW	PV	YP	FL
0 - 500	Air	N/A	N/A	N/A	N/A
500' – 4,616'	Spud Mud	8.4 – 8.6	0 - 15	0 - 10	N/C
4,616' – TD'	3% KCL / Polymer	8.6 – 9.5	5 - 10	5 - 15	>8

Surface hole (0' – 500') will be drilled with an Air Drilling Rig using an air/foam package. Air/foam package will consist of compressors, booster, and foam unit. Package will compress 3200 SCFM of and air and a fluid package capable of pumping 60 gpm nominal, of fluid to 600 psig. This same package will move 2100 SCFM two staged @ 1500 psig.

Special Drilling Operations

- Rotating Head
- Blooie line discharge 100 feet from well bore and securely anchored
- Straight run on blooie line
- Compressors located in the opposite direction from the blooie line
- Compressors located a minimum of 100 feet the well bore

6. Testing, Logging and Core Programs

Cores: None planned
DST: None planned

Surveys: Per Directional Plan

Mud Logger: Surface

Samples: 30' samples from surface to Entrada
10' samples to TD

Open Hole Logging Program: Triple Combo TD to Surface Casing

7. ANTICIPATED ABNORMAL PRESSURES OR TEMPERATURES:

No H_2S gas is anticipated.

Maximum pressure at the base of the Curtis, 4,933 psi (0.433 psi/ft normal pressure gradient) at 11,394' TVD.

Anticipated bottomhole pressure at TD is 4,269 psi (0.35 psi/ft) at 12,197' TVD (6.73 ppg equivalent).

Normal BHT calculated at 1.25^{o}F/100' with a 65^{o}F surface Temperature.
BHT @ 12,197' TVD = 217^{o}F.

8. ANTICIPATED STARTING DATE AND DURATION:

Dirt work startup: Location Built

Spud: October 2009

Duration: 35 - 40 days

Whiting Petroleum Corporation

Uintah County, UT
Section 32-T14S-R20E
UTE Tribal 5-32-14-20
Well

Plan: Plan #1

Standard Planning Report

04 October, 2009

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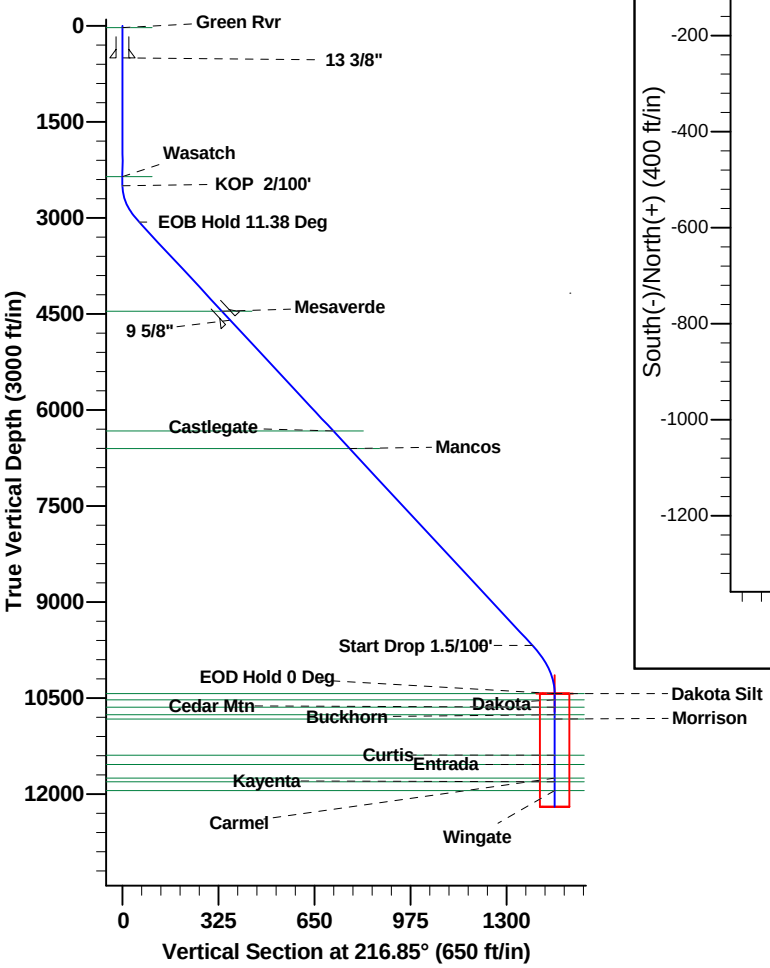
Whiting Petroleum Corporation
UTE Tribal 5-32-14-20
Uintah County, UT
Plan #1

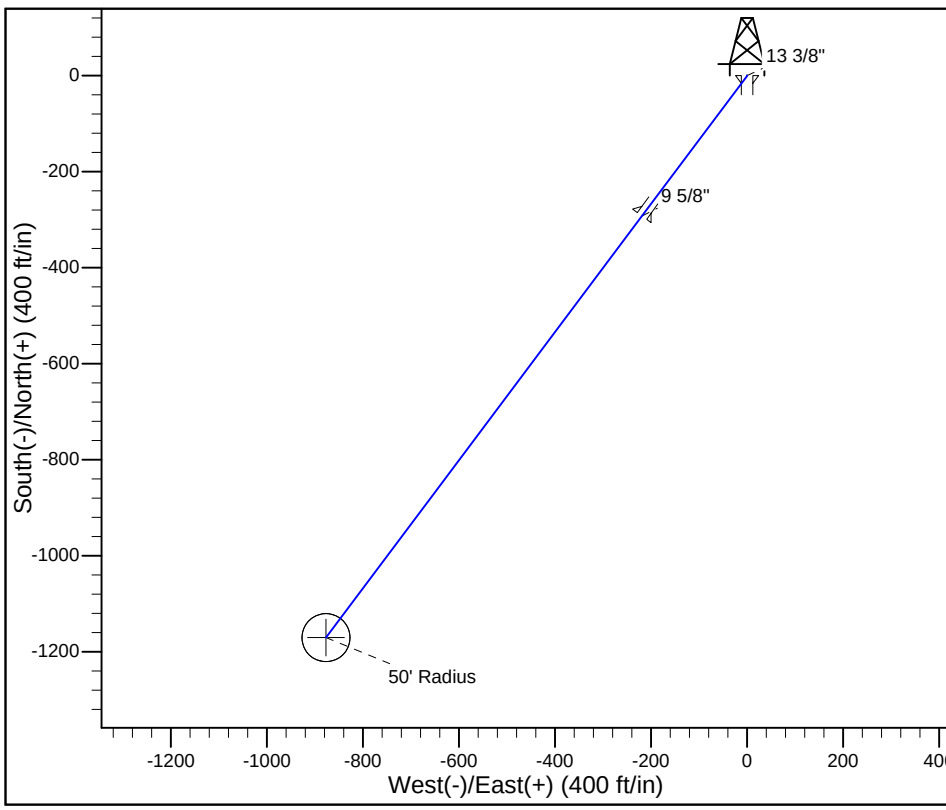
PROJECT DETAILS: Uintah County, UT	
Geodetic System:	US State Plane 1983
Datum:	North American Datum 1983
Ellipsoid:	GRS 1980
Zone:	Utah Central Zone
System Datum:	Mean Sea Level

T M

Azimuths to True North
Magnetic North: 11.29°

Magnetic Field
Strength: 52238.2snT
Dip Angle: 65.52°
Date: 2009/10/04
Model: IGRF200510





SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0
2	2500.0	0.00	0.00	2500.0	0.0	0.0	0.00	0.00	0.0
3	3069.1	11.38	216.85	3065.4	-45.1	-33.8	2.00	216.85	56.3
4	9814.6	11.38	216.85	9678.2	-1110.4	-832.1	0.00	0.00	1387.6
5	10573.4	0.00	0.00	10432.0	-1170.5	-877.1	1.50	180.00	1462.7
6	12338.4	0.00	0.00	12197.0	-1170.5	-877.1	0.00	0.00	1462.7

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
28.0	28.0	Green Rvr
2357.0	2357.0	Wasatch
4457.0	4488.7	Mesaverde
6327.0	6396.2	Castlegate
6602.0	6676.7	Mancos
10432.0	10573.4	Dakota Silt
10527.0	10668.4	Dakota
10644.0	10785.4	Cedar Mtn
10760.0	10901.4	Buckhorn
10827.0	10968.4	Morrison
11394.0	11535.4	Curtis
11537.0	11678.4	Entrada
11750.0	11891.4	Carmel
11807.0	11948.4	Kayenta
11947.0	12088.4	Wingate

5-32-14-20

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Database:	EDM 2003.16 Single User Db	**Local Co-ordinate Reference:**	Well UTE Tribal 5-32-14-20
Company:	Whiting Petroleum Corporation	**TVD Reference:**	WELL @ 7527.0ft (Bronco Rig)
Project:	Uintah County, UT	**MD Reference:**	WELL @ 7527.0ft (Bronco Rig)
Site:	Section 32-T14S-R20E	**North Reference:**	True
Well:	UTE Tribal 5-32-14-20	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Well		
Design:	Plan #1		

Project Uintah County, UT

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Utah Central Zone		

Site Section 32-T14S-R20E

Site Position:		**Northing:**	7,013,846.02 ft	**Latitude:**	39° 33' 39.240 N
From:	Lat/Long	**Easting:**	2,145,484.00 ft	**Longitude:**	109° 42' 30.161 W
Position Uncertainty:	0.0 ft	**Slot Radius:**	"	**Grid Convergence:**	1.15 °

Well UTE Tribal 5-32-14-20

Well Position	**+N/-S**	0.0 ft	**Northing:**	7,013,837.29 ft	**Latitude:**	39° 33' 39.020 N
	+E/-W	0.0 ft	**Easting:**	2,146,160.24 ft	**Longitude:**	109° 42' 21.530 W
Position Uncertainty		0.0 ft	**Wellhead Elevation:**	7,527.0 ft	**Ground Level:**	7,499.0 ft

Wellbore Well

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	2009/10/04	11.29	65.52	52,238

Design Plan #1

Audit Notes:

Version:		**Phase:**	PROTOTYPE	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	216.85

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,069.1	11.38	216.85	3,065.4	-45.1	-33.8	2.00	2.00	0.00	216.85	
9,814.6	11.38	216.85	9,678.2	-1,110.4	-832.1	0.00	0.00	0.00	0.00	
10,573.4	0.00	0.00	10,432.0	-1,170.5	-877.1	1.50	-1.50	0.00	180.00	5-32-14-20
12,338.4	0.00	0.00	12,197.0	-1,170.5	-877.1	0.00	0.00	0.00	0.00	

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Site:	Section 32-T14S-R20E	**North Reference:**	True
Well:	UTE Tribal 5-32-14-20	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Well		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
28.0	0.00	0.00	28.0	0.0	0.0	0.0	0.00	0.00	0.00
Green Rvr									
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
13 3/8"									
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,357.0	0.00	0.00	2,357.0	0.0	0.0	0.0	0.00	0.00	0.00
Wasatch									
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP 2/100'									
2,600.0	2.00	216.85	2,600.0	-1.4	-1.0	1.7	2.00	2.00	0.00
2,700.0	4.00	216.85	2,699.8	-5.6	-4.2	7.0	2.00	2.00	0.00
2,800.0	6.00	216.85	2,799.5	-12.6	-9.4	15.7	2.00	2.00	0.00
2,900.0	8.00	216.85	2,898.7	-22.3	-16.7	27.9	2.00	2.00	0.00
3,000.0	10.00	216.85	2,997.5	-34.8	-26.1	43.5	2.00	2.00	0.00
3,069.1	11.38	216.85	3,065.4	-45.1	-33.8	56.3	2.00	2.00	0.00
EOB Hold 11.38 Deg									
3,100.0	11.38	216.85	3,095.7	-50.0	-37.4	62.4	0.00	0.00	0.00
3,200.0	11.38	216.85	3,193.7	-65.8	-49.3	82.2	0.00	0.00	0.00
3,300.0	11.38	216.85	3,291.7	-81.6	-61.1	101.9	0.00	0.00	0.00
3,400.0	11.38	216.85	3,389.8	-97.3	-72.9	121.6	0.00	0.00	0.00
3,500.0	11.38	216.85	3,487.8	-113.1	-84.8	141.4	0.00	0.00	0.00
3,600.0	11.38	216.85	3,585.8	-128.9	-96.6	161.1	0.00	0.00	0.00
3,700.0	11.38	216.85	3,683.9	-144.7	-108.5	180.9	0.00	0.00	0.00
3,800.0	11.38	216.85	3,781.9	-160.5	-120.3	200.6	0.00	0.00	0.00
3,900.0	11.38	216.85	3,879.9	-176.3	-132.1	220.3	0.00	0.00	0.00
4,000.0	11.38	216.85	3,978.0	-192.1	-144.0	240.1	0.00	0.00	0.00
4,100.0	11.38	216.85	4,076.0	-207.9	-155.8	259.8	0.00	0.00	0.00
4,200.0	11.38	216.85	4,174.0	-223.7	-167.6	279.5	0.00	0.00	0.00
4,300.0	11.38	216.85	4,272.1	-239.5	-179.5	299.3	0.00	0.00	0.00
4,400.0	11.38	216.85	4,370.1	-255.3	-191.3	319.0	0.00	0.00	0.00

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Site:	Section 32-T14S-R20E	**North Reference:**	True
Well:	UTE Tribal 5-32-14-20	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Well		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,488.7	11.38	216.85	4,457.0	-269.3	-201.8	336.5	0.00	0.00	0.00
Mesaverde									
4,500.0	11.38	216.85	4,468.1	-271.1	-203.1	338.7	0.00	0.00	0.00
4,600.0	11.38	216.85	4,566.2	-286.9	-215.0	358.5	0.00	0.00	0.00
4,634.5	11.38	216.85	4,600.0	-292.3	-219.0	365.3	0.00	0.00	0.00
9 5/8"									
4,700.0	11.38	216.85	4,664.2	-302.7	-226.8	378.2	0.00	0.00	0.00
4,800.0	11.38	216.85	4,762.2	-318.5	-238.6	397.9	0.00	0.00	0.00
4,900.0	11.38	216.85	4,860.3	-334.2	-250.5	417.7	0.00	0.00	0.00
5,000.0	11.38	216.85	4,958.3	-350.0	-262.3	437.4	0.00	0.00	0.00
5,100.0	11.38	216.85	5,056.3	-365.8	-274.1	457.1	0.00	0.00	0.00
5,200.0	11.38	216.85	5,154.4	-381.6	-286.0	476.9	0.00	0.00	0.00
5,300.0	11.38	216.85	5,252.4	-397.4	-297.8	496.6	0.00	0.00	0.00
5,400.0	11.38	216.85	5,350.4	-413.2	-309.6	516.4	0.00	0.00	0.00
5,500.0	11.38	216.85	5,448.5	-429.0	-321.5	536.1	0.00	0.00	0.00
5,600.0	11.38	216.85	5,546.5	-444.8	-333.3	555.8	0.00	0.00	0.00
5,700.0	11.38	216.85	5,644.5	-460.6	-345.1	575.6	0.00	0.00	0.00
5,800.0	11.38	216.85	5,742.6	-476.4	-357.0	595.3	0.00	0.00	0.00
5,900.0	11.38	216.85	5,840.6	-492.2	-368.8	615.0	0.00	0.00	0.00
6,000.0	11.38	216.85	5,938.6	-508.0	-380.6	634.8	0.00	0.00	0.00
6,100.0	11.38	216.85	6,036.7	-523.8	-392.5	654.5	0.00	0.00	0.00
6,200.0	11.38	216.85	6,134.7	-539.6	-404.3	674.2	0.00	0.00	0.00
6,300.0	11.38	216.85	6,232.7	-555.4	-416.2	694.0	0.00	0.00	0.00
6,396.2	11.38	216.85	6,327.0	-570.5	-427.5	713.0	0.00	0.00	0.00
Castlegate									
6,400.0	11.38	216.85	6,330.8	-571.1	-428.0	713.7	0.00	0.00	0.00
6,500.0	11.38	216.85	6,428.8	-586.9	-439.8	733.4	0.00	0.00	0.00
6,600.0	11.38	216.85	6,526.8	-602.7	-451.7	753.2	0.00	0.00	0.00
6,676.7	11.38	216.85	6,602.0	-614.8	-460.7	768.3	0.00	0.00	0.00
Mancos									
6,700.0	11.38	216.85	6,624.9	-618.5	-463.5	772.9	0.00	0.00	0.00
6,800.0	11.38	216.85	6,722.9	-634.3	-475.3	792.7	0.00	0.00	0.00
6,900.0	11.38	216.85	6,820.9	-650.1	-487.2	812.4	0.00	0.00	0.00
7,000.0	11.38	216.85	6,919.0	-665.9	-499.0	832.1	0.00	0.00	0.00
7,100.0	11.38	216.85	7,017.0	-681.7	-510.8	851.9	0.00	0.00	0.00
7,200.0	11.38	216.85	7,115.0	-697.5	-522.7	871.6	0.00	0.00	0.00
7,300.0	11.38	216.85	7,213.1	-713.3	-534.5	891.3	0.00	0.00	0.00
7,400.0	11.38	216.85	7,311.1	-729.1	-546.3	911.1	0.00	0.00	0.00
7,500.0	11.38	216.85	7,409.1	-744.9	-558.2	930.8	0.00	0.00	0.00
7,600.0	11.38	216.85	7,507.2	-760.7	-570.0	950.5	0.00	0.00	0.00
7,700.0	11.38	216.85	7,605.2	-776.5	-581.8	970.3	0.00	0.00	0.00
7,800.0	11.38	216.85	7,703.2	-792.3	-593.7	990.0	0.00	0.00	0.00
7,900.0	11.38	216.85	7,801.3	-808.0	-605.5	1,009.7	0.00	0.00	0.00
8,000.0	11.38	216.85	7,899.3	-823.8	-617.3	1,029.5	0.00	0.00	0.00
8,100.0	11.38	216.85	7,997.3	-839.6	-629.2	1,049.2	0.00	0.00	0.00
8,200.0	11.38	216.85	8,095.4	-855.4	-641.0	1,068.9	0.00	0.00	0.00
8,300.0	11.38	216.85	8,193.4	-871.2	-652.8	1,088.7	0.00	0.00	0.00
8,400.0	11.38	216.85	8,291.4	-887.0	-664.7	1,108.4	0.00	0.00	0.00
8,500.0	11.38	216.85	8,389.4	-902.8	-676.5	1,128.2	0.00	0.00	0.00
8,600.0	11.38	216.85	8,487.5	-918.6	-688.3	1,147.9	0.00	0.00	0.00
8,700.0	11.38	216.85	8,585.5	-934.4	-700.2	1,167.6	0.00	0.00	0.00
8,800.0	11.38	216.85	8,683.5	-950.2	-712.0	1,187.4	0.00	0.00	0.00
8,900.0	11.38	216.85	8,781.6	-966.0	-723.9	1,207.1	0.00	0.00	0.00

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Wellbore:	Well		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,000.0	11.38	216.85	8,879.6	-981.8	-735.7	1,226.8	0.00	0.00	0.00
9,100.0	11.38	216.85	8,977.6	-997.6	-747.5	1,246.6	0.00	0.00	0.00
9,200.0	11.38	216.85	9,075.7	-1,013.4	-759.4	1,266.3	0.00	0.00	0.00
9,300.0	11.38	216.85	9,173.7	-1,029.2	-771.2	1,286.0	0.00	0.00	0.00
9,400.0	11.38	216.85	9,271.7	-1,045.0	-783.0	1,305.8	0.00	0.00	0.00
9,500.0	11.38	216.85	9,369.8	-1,060.7	-794.9	1,325.5	0.00	0.00	0.00
9,600.0	11.38	216.85	9,467.8	-1,076.5	-806.7	1,345.2	0.00	0.00	0.00
9,700.0	11.38	216.85	9,565.8	-1,092.3	-818.5	1,365.0	0.00	0.00	0.00
9,800.0	11.38	216.85	9,663.9	-1,108.1	-830.4	1,384.7	0.00	0.00	0.00
9,814.6	11.38	216.85	9,678.2	-1,110.4	-832.1	1,387.6	0.00	0.00	0.00
Start Drop 1.5/100'									
9,900.0	10.10	216.85	9,762.1	-1,123.2	-841.6	1,403.5	1.50	-1.50	0.00
10,000.0	8.60	216.85	9,860.8	-1,136.2	-851.4	1,419.8	1.50	-1.50	0.00
10,100.0	7.10	216.85	9,959.8	-1,147.1	-859.6	1,433.4	1.50	-1.50	0.00
10,200.0	5.60	216.85	10,059.2	-1,156.0	-866.2	1,444.5	1.50	-1.50	0.00
10,300.0	4.10	216.85	10,158.8	-1,162.7	-871.3	1,452.9	1.50	-1.50	0.00
10,400.0	2.60	216.85	10,258.7	-1,167.4	-874.8	1,458.8	1.50	-1.50	0.00
10,500.0	1.10	216.85	10,358.6	-1,170.0	-876.7	1,462.0	1.50	-1.50	0.00
10,573.4	0.00	0.00	10,432.0	-1,170.5	-877.1	1,462.7	1.50	-1.50	195.07
EOD Hold 0 Deg - Dakota Silt - 5-32-14-20									
10,600.0	0.00	0.00	10,458.6	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
10,668.4	0.00	0.00	10,527.0	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
Dakota									
10,700.0	0.00	0.00	10,558.6	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
10,785.4	0.00	0.00	10,644.0	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
Cedar Mtn									
10,800.0	0.00	0.00	10,658.6	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
10,900.0	0.00	0.00	10,758.6	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
10,901.4	0.00	0.00	10,760.0	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
Buckhorn									
10,968.4	0.00	0.00	10,827.0	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
Morrison									
11,000.0	0.00	0.00	10,858.6	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
11,100.0	0.00	0.00	10,958.6	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
11,200.0	0.00	0.00	11,058.6	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
11,300.0	0.00	0.00	11,158.6	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
11,400.0	0.00	0.00	11,258.6	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
11,500.0	0.00	0.00	11,358.6	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
11,535.4	0.00	0.00	11,394.0	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
Curtis									
11,600.0	0.00	0.00	11,458.6	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
11,678.4	0.00	0.00	11,537.0	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
Entrada									
11,700.0	0.00	0.00	11,558.6	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
11,800.0	0.00	0.00	11,658.6	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
11,891.4	0.00	0.00	11,750.0	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
Carmel									
11,900.0	0.00	0.00	11,758.6	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
11,948.4	0.00	0.00	11,807.0	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
Kayenta									
12,000.0	0.00	0.00	11,858.6	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
12,088.4	0.00	0.00	11,947.0	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00

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Database:	EDM 2003.16 Single User Db	**Local Co-ordinate Reference:**	Well UTE Tribal 5-32-14-20
Company:	Whiting Petroleum Corporation	**TVD Reference:**	WELL @ 7527.0ft (Bronco Rig)
Project:	Uintah County, UT	**MD Reference:**	WELL @ 7527.0ft (Bronco Rig)
Site:	Section 32-T14S-R20E	**North Reference:**	True
Well:	UTE Tribal 5-32-14-20	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Well		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
Wingate									
12,100.0	0.00	0.00	11,958.6	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
12,200.0	0.00	0.00	12,058.6	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
12,300.0	0.00	0.00	12,158.6	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
12,338.4	0.00	0.00	12,197.0	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
5-32-14-20 - plan hits target - Circle (radius 50.0)	0.00	0.00	10,432.0	-1,170.5	-877.1	7,012,649.39	2,145,306.75	39° 33' 27.450 N	109° 42' 32.730 W

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
500.0	500.0	13 3/8"	13-3/8	17-1/2
4,634.5	4,600.0	9 5/8"	9-5/8	12-1/4
	12,338.4	4 1/2"	4-1/2	7-7/8

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
10,573.4	10,432.0	Dakota Silt		0.00	
10,668.4	10,527.0	Dakota		0.00	
10,901.4	10,760.0	Buckhorn		0.00	
11,891.4	11,750.0	Carmel		0.00	
11,948.4	11,807.0	Kayenta		0.00	
6,676.7	6,602.0	Mancos		0.00	
11,535.4	11,394.0	Curtis		0.00	
6,396.2	6,327.0	Castlegate		0.00	
4,488.7	4,457.0	Mesaverde		0.00	
11,678.4	11,537.0	Entrada		0.00	
12,088.4	11,947.0	Wingate		0.00	
10,968.4	10,827.0	Morrison		0.00	
2,357.0	2,357.0	Wasatch		0.00	
28.0	28.0	Green Rvr		0.00	
10,785.4	10,644.0	Cedar Mtn		0.00	

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Database:	EDM 2003.16 Single User Db	**Local Co-ordinate Reference:**	Well UTE Tribal 5-32-14-20
Company:	Whiting Petroleum Corporation	**TVD Reference:**	WELL @ 7527.0ft (Bronco Rig)
Project:	Uintah County, UT	**MD Reference:**	WELL @ 7527.0ft (Bronco Rig)
Site:	Section 32-T14S-R20E	**North Reference:**	True
Well:	UTE Tribal 5-32-14-20	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Well		
Design:	Plan #1		

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
2,500.0	2,500.0	0.0	0.0	KOP 2/100'
3,069.1	3,065.4	-45.1	-33.8	EOB Hold 11.38 Deg
9,814.6	9,678.2	-1,110.4	-832.1	Start Drop 1.5/100'
10,573.4	10,432.0	-1,170.5	-877.1	EOD Hold 0 Deg

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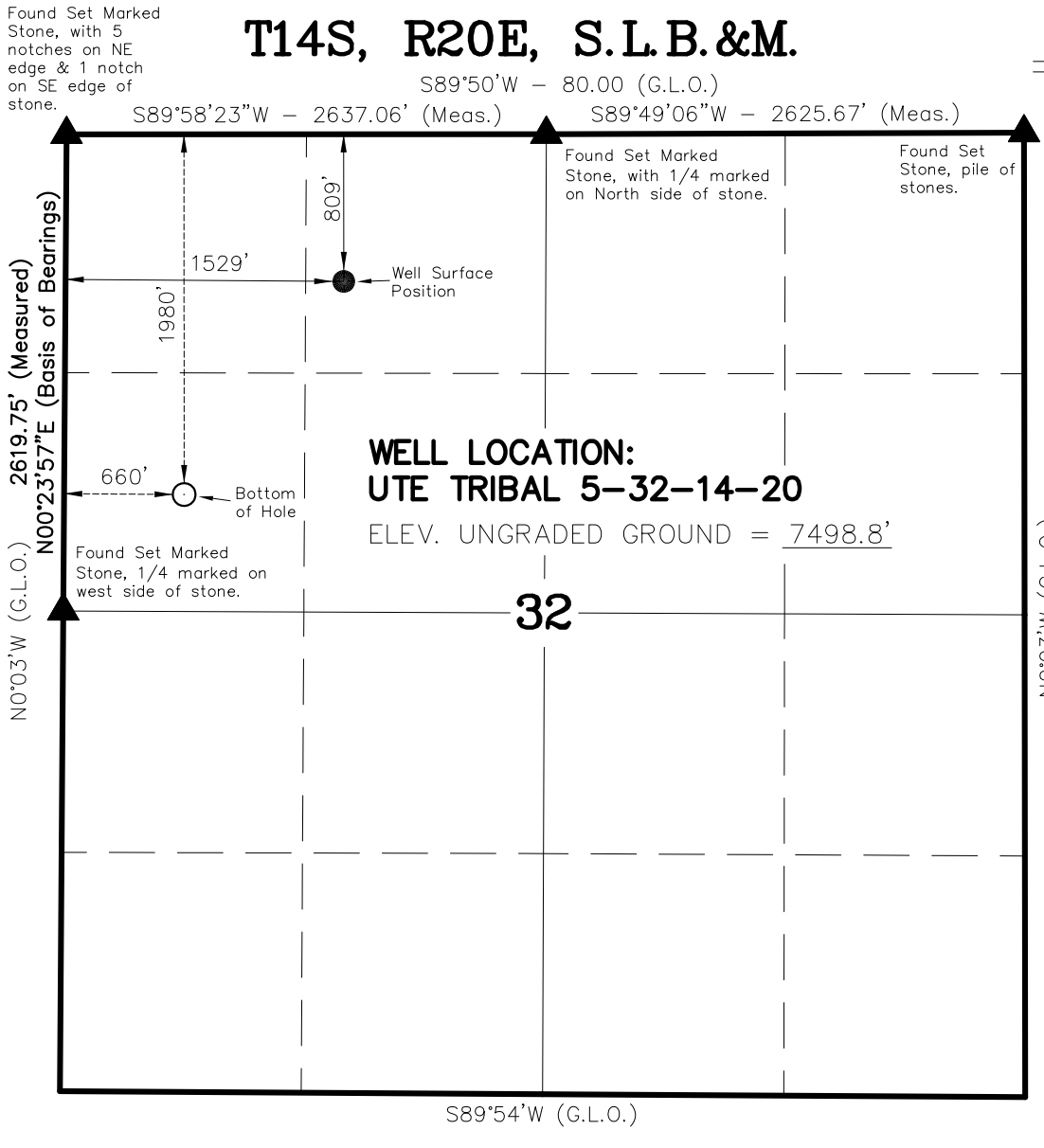
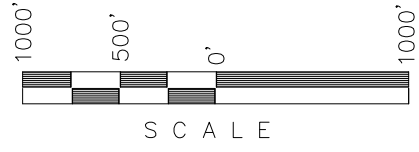
T14S, R20E, S.L.B.&M.

WHITING OIL AND GAS CORPORATION



WELL LOCATION, UTE TRIBAL 5–32–14–20, LOCATED AS SHOWN IN THE SW 1/4 NW 1/4 OF SECTION 32, T14S, R20E, S.L.B.&M. UINTAH COUNTY, UTAH.



NOTES:

1. Well footages are measured at right angles to the Section Lines.
2. G.L.O. distances are shown in feet or chains. 1 chain = 66 feet.
3. The Bottom of hole bears S36°50'10"W 1463.53' from the Surface Position.
4. Bearings are based on Global Positioning Satellite observations.
5. BASIS OF ELEVATION IS BENCH MARK 60 WF 1952 LOCATED IN THE SW 1/4 OF SECTION 35, T14S, R20E, S.L.B.&M. THE ELEVATION OF THIS BENCH MARK IS SHOWN ON THE FLAT ROCK MESA 7.5 MIN. QUADRANGLE AS BEING 7363'.

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR
REGISTRATION NO. 362251
STATE OF UTAH

REGISTERED LAND SURVEYOR No.362251 KOLBY R. KAY STATE OF UTAH

▲ = SECTION CORNERS LOCATED

UTE TRIBAL 5–32–14–20
(Bottom Hole) NAD 83 Autonomous
LATITUDE = 39° 33' 27.45"
LONGITUDE = 109° 42' 32.73"

UTE TRIBAL 5–32–14–20
(Surface Position) NAD 83 Autonomous
LATITUDE = 39° 33' 39.02"
LONGITUDE = 109° 42' 21.53"

TIMBERLINE (435) 789–1365
ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST – VERNAL, UTAH 84078

DATE SURVEYED: 09–07–07	SURVEYED BY: B.J.S.	SHEET 2 OF 11
DATE DRAWN: 09–25–07	DRAWN BY: M.W.W.	
SCALE: 1" = 1000'	Date Last Revised: 08–03–09	

RECEIVED October 14, 2009

WHITING OIL AND GAS CORPORATION

WELL PAD INTERFERENCE PLAT

UTE TRIBAL 5-32-14-20

BASIS OF ELEVATION IS BENCH MARK 60 WF 1952 LOCATED IN THE SW 1/4 OF SECTION 35, T14S, R20E, S.L.B.&M. THE ELEVATION OF THIS BENCH MARK IS SHOWN ON THE FLAT ROCK MESA 7.5 MIN. QUADRANGLE AS BEING 7363'.

BASIS OF BEARINGS IS THE WEST LINE OF THE NW 1/4 OF SECTION 32, T14S, R20E, S.L.B.&M. WHICH IS TAKEN FROM GLOBAL POSITIONING SATELLITE OBSERVATIONS TO BEAR N00°23'57"E.

N

Existing Road

SURFACE POSITION FOOTAGES:

UTE TRIBAL 5-32-14-20
809' FNL & 1529' FWL

BOTTOM HOLE FOOTAGES

UTE TRIBAL 5-32-14-20
1980' FNL & 660' FWL

PROPOSED GRADED GROUND ELEVATION OF PAD IS 7497.2'.

N88°41'21"W

UTE TRIBAL 5-32-14-20

S36°50'10"W - 1463.53' (To Bottom Hole)

LATITUDE & LONGITUDE
Surface Position - (NAD 83) Autonomous

WELL	N. LATITUDE	W. LONGITUDE
5-32-14-20	39°33'39.02"	109°42'21.53"

LATITUDE & LONGITUDE
Bottom Hole - (NAD 83) Autonomous

WELL	N. LATITUDE	W. LONGITUDE
5-32-14-20	39°33'27.45"	109°42'32.73"

RELATIVE COORDINATES
From Surface Position to Bottom Hole

WELL	NORTH	EAST
5-32-14-20	-1,171'	-877'

60' 30' 0' 60'

SCALE

Section 32, T14S, R20E, S.L.B.&M. | Qtr/Qtr Location: NE NW (Surface)

Date Surveyed: 09-07-07	Date Drawn: 08-04-09	Date Last Revision:
Surveyed By: B.J.S.	Drawn By: M.W.W.	Scale: 1" = 60'

Timberline (435) 789-1365
Engineering & Land Surveying, Inc.
209 NORTH 300 WEST VERNAL, UTAH 84078

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RECOMMENDED BY				
Central Rockies				
REVISIONS:				
1	Updated TD to Wingate	DATE:	10/02/09	
2		DATE:		

WHITING PETROLEUM CORP.
1700 BROADWAY Suite 2300
Denver. CO 80290
303-837-1661

WELL INFORMATION				
API:	43-047-39741-00		**AFE:**	
WELL NAME:	UTE TRIBAL 5-32-14-20		**ACQUISITION:**	CEA
PROSPECT:	FLAT ROCK		**RESERVE CATEGORY:**	
SURFACE LOCATION:	NENW 32 14S 20E		**SURFACE LONG, LAT:**	-109.7052200, 39.5609000
SURFACE FOOTAGE:	809 FNL 1529 FWL		**BOTTOM HOLE LONG, LAT:**	-109.7083781, 39.5577005
BOTTOM HOLE LOCATION:	SWNW 32 14S 20E		**SURVEYED ELEVATION (GR):**	7,499
BOTTOM HOLE FOOTAGE:	1980 FNL 660 FWL		**HEIGHT TO KB:**	28
COUNTY:	Uintah		**ACTUAL ELEV. (KB):**	7,527
STATE:	UT		**TVD (if horizontal well):**	ft.
LOCATION MAY BE MOVED:			**TMD (if horizontal well):**	ft.
PROPOSED TOTAL DEPTH (TVD):	12,197		**FORMATION AT TD:**	Wingate

FORMATION	TOP - TVD	TOP - TVDSS	INTVL	CORE	LITHOLOGY	GEOLOGIC HAZARDS
Green River Fm @ Surface	28	7,499	2,329		Oil Shale	oil and/or gas anticipated
Wasatch Fm	2,357	5,170	2,100		SS-SH	oil and/or gas anticipated
Mesaverde	4,457	3,070	1,870		SS-SH	oil and/or gas anticipated
Castlegate SS	6,327	1,200	275		Sandstone	gas
Mancos	6,602	925	505		SS-SH	gas
Mancos B	7,107	420	3,325		Sandstone	gas
Dakota Silt	10,432	(2,905)	95		Sandstone	gas
Dakota	10,527	(3,000)	117		Sandstone	gas
Cedar Mtn Fm	10,644	(3,117)	116		Sandstone	gas
Buckhorn Congl	10,760	(3,233)	67		SS-SH	gas
Morrison Fm	10,827	(3,300)	567		SS-SH	
Curtis Fm	11,394	(3,867)	143		SS-SH	
Entrada SS	11,537	(4,010)	213		Sandstone	gas
Carmel	11,750	(4,223)	57		LS-SH	
Kayenta	11,807	(4,280)	140		Sandstone	gas
Wingate	11,947	(4,420)	250		Sandstone	gas
TD	12,197	(4,670)				

WIRELINE LOGS		CORING & CUTTINGS	
LOGGING COMPANY:		**CORING TOOL CO:**	
TRIPLE COMBO	YES	**CORE ANALYSIS CO:**	
FROM:	TD to surf		
		30' SAMPLES: Surf Csg	**TO:** TD
		10' SAMPLES:	**TO:**
		SHIP CUTTINGS TO:	Larry Rasmussen
			Whiting Petroleum Corp.
			1700 Broadway, Ste 2300
			Denver, CO 80290

WELLSITE GEOLOGIST		MUD LOGGER	
NAME:		**NAME:**	
PHONE		**PHONE**	
STARTING DEPTH:		**STARTING DEPTH:**	Surface Csg

NOTIFICATIONS		OFFICE	MOBILE	HOME
1st	Larry Rasmussen - Geologist	303-390-4093	720-272-5978	303-561-0788
2nd	John Forster - Regional Geol Manager	303-390-4117	303-324-7690	303-850-0346
3rd	Dana Greathouse - Regional Drilling Mgr	303-390-4247	303-808-3687	303-730-1204
4th	Tom Smith - Sr. Operations Engineer	303-390-4124	720-283-3272	

SPECIAL INSTRUCTIONS: Anticipate continuous gas from Wasatch through the Entrada, possibly Wingate.
Expect underpressured reservoirs, 0.35 psi/ft, Bottom Hole Temperature of ~230F

Prepared by: Larry Rasmussen 10/2/2009

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HALLIBURTON

Whiting Oil & Gas Corp Ebusiness
Do Not Mail - 1700 Broadway Ste2300
Denver, Colorado 80290

Ute Tribal 5-32-14-20
Flat Rock Field
Uintah County, Utah
United States of America
S:32 T:14S R:20E

Multiple String Cement Recommendation

Prepared for: Mr. Dana Greathouse

October 5, 2009
Version: 1

Submitted by:
Matt Collins
Halliburton
1125 17th Street #1900
Denver, Colorado 80202
303.501.9557

HALLIBURTON

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Halliburton appreciates the opportunity to present this proposal and looks forward to being of service to you.

Foreword

Enclosed is our recommended procedure for cementing the casing strings in the referenced well. The information in this proposal includes well data, calculations, materials requirements, and cost estimates. This proposal is based on information from our field personnel and previous cementing services in the area.

Halliburton Energy Services recognizes the importance of meeting society's needs for health, safety, and protection of the environment. It is our intention to proactively work with employees, customers, the public, governments, and others to use natural resources in an environmentally sound manner while protecting the health, safety, and environmental processes while supplying high quality products and services to our customers.

We appreciate the opportunity to present this proposal for your consideration and we look forward to being of service to you. Our Services for your well will be coordinated through the Service Center listed below. If you require any additional information or additional designs, please feel free to contact myself or our field representative listed below.

Prepared and Submitted by:

Matt Collins
Account Representative

SERVICE CENTER:	Vernal
SERVICE COORDINATOR:	Weston Spencer / Cody Slaugh
PSL DISTRICT MANAGER:	Christopher Jerez
PDC:	Jason Bergin / Corey Reynolds
CMT ENGINEERS:	Chris Cicirello / Sean Bullington
	Ted Groff
PHONE NUMBER:	435.789.2550

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Cementing Best Practices

1. Cement quality and weight: You must choose a cement slurry that is designed to solve the problems specific to each casing string.

2. Waiting time: You must hold the cement slurry in place and under pressure until it reaches its' initial set without disturbing it. A cement slurry is a time-dependent liquid and must be allowed to undergo a hydration reaction to produce a competent cement sheath. A fresh cement slurry can be worked (thickening or pump time) as long as it is in a plastic state and before going through its' transition phase. If the cement slurry is not allowed to transition without being disturbed, it may be subjected to changes in density, dilution, settling, water separation, and gas cutting that may lead to a lack of zonal isolation and possible bridging in the annulus.

3. Pipe movement: Pipe movement may be one of the single most influential factors in mud removal. Reciprocation and/or rotation mechanically breaks up gelled mud and changes the flow patterns in the annulus to improve displacement efficiency.

4. Mud properties (for cementing):

Rheology:

Plastic Viscosity (PV) < 15 centipoise (cp)
Yield Point (YP) < 10 lb/100 ft2
These properties should be reviewed with the Mud Engineer, Drilling Engineer, and Company Representative(s) to ensure no hole problems are created.

Gel Strength:

The 10-second/10-minute gel strength values should be such that the 10-second and 10-minute readings are close together or flat (i.e., 5/6). The 30-minute reading should be less than 20 lb/100 ft². Sufficient shear stress may not be achieved on a primary cement job to remove mud left in the hole if the mud were to develop more than 25 lb/100 ft² of gel strength.

Fluid Loss:

Decreasing the filtrate loss into a permeable zone enhances the creation of a thin, competent filter cake. A thin, competent filter cake created by a low fluid loss mud system is desirable over a thick, partially gelled filter cake. A mud system created with a low fluid loss will be more easily displaced. The fluid loss value should be < 15 cc's (ideal would be 5 cc's).

5. Circulation: Prior to cementing circulate full hole volume twice, or until well conditioned mud is being returned to the surface. There should be no cutting in the mud returns. An annular velocity of 260 feet per minute is optimum (SPE/IADC 18617), if possible.

6. Flow rate: Turbulent flow is the most desirable flow regime for mud removal. If turbulence cannot be achieved pump at as high a flow rate that can practically and safely be used to create the maximum flow energy. The highest mud removal is achieved when the maximum flow energy is obtained.

7. Pipe Centralization: This Cement will take the path of least resistance, therefore proper centralization is important to help prevent the casing from contacting the borehole wall. A minimum standoff of 70% should be targeted for optimum displacement efficiency.

8. Rat hole: A weighted viscous pill placed in the rat hole prior to cementing will minimize the risk of higher density cement mixing with lower density mud when the well is static.

9. Top and Bottom plugs: A top and bottom plug are recommended to be run on all primary casing jobs. The bottom plug should be run after the spacer and ahead of the first cement slurry.

10. Spacers and flushes: Spacers and/or flushes should be used to prevent contamination between the cement slurry and the drilling fluid. They are also used to clean the wellbore and aid with bonding. To determine the volume, either a minimum of 10 minutes contact time or 1000 ft. of annular fill, whichever is greater, is recommended.

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Job Information — 13 3/8" Casing

Well Name: Ute Tribal — Well #: 5-32-14-20

20" Conductor	0 - 60 ft (MD)
Outer Diameter	20.000 in
Inner Diameter	19.124 in
Linear Weight	94 lbm/ft
Casing Grade	H-40
17 1/2" Open Hole	60 - 500 ft (MD)
Inner Diameter	17.500 in
Job Excess	100 %
13 3/8" Surface Casing	0 - 500 ft (MD)
Outer Diameter	13.375 in
Inner Diameter	12.715 in
Linear Weight	48 lbm/ft
Casing Grade	H-40

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Calculations — 13 3/8" Casing

Spacer:

Total Spacer	= 112.29 ft^3
	= 20.00 bbl

Cement : (500.00 ft fill)

60.00 ft * 1.019 ft^3/ft * 0 %	= 61.14 ft^3
440.00 ft * 0.6946 ft^3/ft * 100 %	= 611.28 ft^3
Lead Cement	= 672.42 ft^3
	= 119.76 bbl

Shoe Joint Volume: (40.00 ft fill)

40.00 ft * 0.8818 ft^3/ft	= 35.27 ft^3
	= 6.28 bbl
Tail plus shoe joint	= 707.69 ft^3
	= 126.05 bbl
Total Tail	= 393 sks

Total Pipe Capacity:

500.00 ft * 0.8818 ft^3/ft	= 440.89 ft^3
	= 78.53 bbl

Displacement Volume to Shoe Joint:

Capacity of Pipe - Shoe Joint	= 78.53 bbl - 6.28 bbl
	= 72.24 bbl

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Fluid Instructions

Fluid 1: Water Spacer

Gel Water

Fluid Density:	8.34 lbm/gal
Fluid Volume:	20 bbl

Fluid 2: Lead Cement

Rockies LT

0.25 lbm/sk Kwik Seal (Lost Circulation Additive)

0.125 lbm/sk Poly-E-Flake (Lost Circulation Additive)

Fluid Weight	13.50 lbm/gal
Slurry Yield:	1.80 ft^3/sk
Total Mixing Fluid:	9.33 Gal/sk
Top of Fluid:	0 ft
Calculated Fill:	500 ft
Volume:	126.05 bbl
Calculated Sacks:	393.16 sks
Proposed Sacks:	395 sks

Fluid 3: Water Spacer

Water Displacement

Fluid Density:	8.34 lbm/gal
Fluid Volume:	72.24 bbl

Fluid 4: Top Out Cement

Premium Plus - Type III

94 lbm/sk Premium Plus - Type III (Cement-non-api)

2 % Calcium Chloride (Accelerator)

Fluid Weight	14.50 lbm/gal
Slurry Yield:	1.41 ft^3/sk
Total Mixing Fluid:	6.86 Gal/sk
Proposed Sacks:	200 sks

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Detailed Pumping Schedule

Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Estimated Avg Rate bbl/min	Downhole Volume
1	Spacer	Gel Water	8.3		20 bbl
2	Cement	Primary Cement	13.5		395 sks
3	Spacer	Water Displacement	8.3		72.24 bbl
4	Cement	Top Out Cement	14.5		200 sks

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Job Information — 9 5/8" Casing

Well Name: Ute Tribal	Well #: 5-32-14-20
13 3/8" Surface Casing	0 - 500 ft (MD)
Outer Diameter	13.375 in
Inner Diameter	12.715 in
Linear Weight	48 lbm/ft
Casing Grade	H-40
12 1/4" Open Hole	500 - 4616 ft (MD)
Inner Diameter	12.250 in
Job Excess	15 %
9 5/8" Intermediate Casing	0 - 4616 ft (MD)
Outer Diameter	9.625 in
Inner Diameter	8.921 in
Linear Weight	36 lbm/ft
Casing Grade	J-55
BHCT	100 degF

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Spacer:

Total Spacer	= 112.29 ft^3
	= 20.00 bbl

Spacer:

2.00 ft * 0.3765 ft^3/ft * 0 %	= 0.75 ft^3
Total Spacer	= 224.58 ft^3
	= 40.00 bbl

Spacer:

298.00 ft * 0.3765 ft^3/ft * 0 %	= 112.20 ft^3
Total Spacer	= 112.29 ft^3
	= 20.00 bbl

Cement : (3816.00 ft fill)

200.00 ft * 0.3765 ft^3/ft * 0 %	= 75.30 ft^3
3616.00 ft * 0.3132 ft^3/ft * 15 %	= 1302.36 ft^3
Total Lead Cement	= 1377.66 ft^3
	= 245.37 bbl
Sacks of Cement	= 361 sks

Cement : (500.00 ft fill)

500.00 ft * 0.3132 ft^3/ft * 15 %	= 180.08 ft^3
Tail Cement	= 180.08 ft^3
	= 32.07 bbl

Shoe Joint Volume: (40.00 ft fill)

40.00 ft * 0.4341 ft^3/ft	= 17.36 ft^3
	= 3.09 bbl
Tail plus shoe joint	= 197.45 ft^3
	= 35.17 bbl
Total Tail	= 171 sks

Total Pipe Capacity:

4616.00 ft * 0.4341 ft^3/ft	= 2003.64 ft^3
	= 356.86 bbl

Displacement Volume to Shoe Joint:

Capacity of Pipe - Shoe Joint	= 356.86 bbl - 3.09 bbl
	= 353.77 bbl

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Fluid Instructions

Fluid 1: Water Spacer
Fresh Water

Fluid Density:	8.34 lbm/gal
Fluid Volume:	20 bbl

Fluid 2: Reactive Spacer
SUPER FLUSH 101

Fluid Density:	10 lbm/gal
Fluid Volume:	40 bbl

Fluid 3: Water Spacer
Fresh Water

Fluid Density:	8.34 lbm/gal
Fluid Volume:	20 bbl

Fluid 4: Lead Cement
ECONOCEM (TM) SYSTEM
0.125 lbm/sk Poly-E-Flake (Lost Circulation Additive)

Fluid Weight	11 lbm/gal
Slurry Yield:	3.81 ft^3/sk
Total Mixing Fluid:	23.01 Gal/sk
Top of Fluid:	300 ft
Calculated Fill:	3816 ft
Volume:	245.37 bbl
Calculated Sacks:	361.21 sks
Proposed Sacks:	365 sks

Fluid 5: Tail Cement
Premium Cement
94 lbm/sk Premium Cement (Cement)
0.3 % Halad(R)-344 (Low Fluid Loss Control)
0.25 % CFR-3 (Dispersant)
0.35 % HR-5 (Retarder)
0.2 % Super CBL (Gas Migration Control)

Fluid Weight	15.80 lbm/gal
Slurry Yield:	1.15 ft^3/sk
Total Mixing Fluid:	4.94 Gal/sk
Top of Fluid:	4116 ft
Calculated Fill:	500 ft
Volume:	35.17 bbl
Calculated Sacks:	171.39 sks
Proposed Sacks:	175 sks

Fluid 6: Mud
Mud Displacement

Fluid Density:	10 lbm/gal
Fluid Volume	353.77 bbl

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Detailed Pumping Schedule

Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Estimated Avg Rate bbl/min	Downhole Volume
1	Spacer	Fresh Water	8.3		20 bbl
2	Spacer	SUPER FLUSH 101	10.0		40 bbl
3	Spacer	Fresh Water	8.3		20 bbl
4	Cement	EconoCem V3	11.0		365 sks
5	Cement	Premium Cement	15.8		175 sks
6	Mud	Mud Displacement	10.0		353.77 bbl

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Job Information — 4 1/2" Casing Option #1

Well Name: Ute Tribal — Well #: 5-32-14-20

9 5/8" Intermediate Casing	0 - 4616 ft (MD)
Outer Diameter	9.625 in
Inner Diameter	8.921 in
Linear Weight	36 lbm/ft
Casing Grade	J-55
7 7/8" Open Hole	4616 - 12338 ft (MD)
Inner Diameter	7.875 in
Job Excess	15 %
4 1/2" Production Casing	0 - 12338 ft (MD)
Outer Diameter	4.500 in
Inner Diameter	4.000 in
Linear Weight	11.60 lbm/ft
Casing Grade	P-110
Mud Weight	9 lbm/gal
BHCT	180 degF

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Calculations — 4 1/2" Casing Option #1

Spacer:	
173.00 ft * 0.3236 ft^3/ft * 0 %	= 55.99 ft^3
Total Spacer	= 56.15 ft^3
	= 10.00 bbl
Spacer:	
347.00 ft * 0.3236 ft^3/ft * 0 %	= 112.30 ft^3
Total Spacer	= 112.29 ft^3
	= 20.00 bbl
Spacer:	
173.00 ft * 0.3236 ft^3/ft * 0 %	= 55.99 ft^3
Total Spacer	= 56.15 ft^3
	= 10.00 bbl
Cement : (6055.00 ft fill)	
200.00 ft * 0.3236 ft^3/ft * 0 %	= 64.72 ft^3
5855.00 ft * 0.2278 ft^3/ft * 15 %	= 1533.81 ft^3
Total Foamed Lead Cement	= 1598.53 ft^3
	= 284.71 bbl
Sacks of Cement	= 796 sks
Cement : (1867.00 ft fill)	
1867.00 ft * 0.2278 ft^3/ft * 15 %	= 489.09 ft^3
Tail Cement	= 489.09 ft^3
	= 87.11 bbl
Shoe Joint Volume: (40.00 ft fill)	
40.00 ft * 0.0873 ft^3/ft	= 3.49 ft^3
	= 0.62 bbl
Tail plus shoe joint	= 492.58 ft^3
	= 87.73 bbl
Total Tail	= 335 sks
Total Pipe Capacity:	
12338.00 ft * 0.0873 ft^3/ft	= 1076.69 ft^3
	= 191.77 bbl
Displacement Volume to Shoe Joint:	
Capacity of Pipe - Shoe Joint	= 191.77 bbl - 0.62 bbl
	= 191.15 bbl

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Fluid Instructions

Fluid 1: Water Spacer
Fresh Water

Fluid Density:	8.34 lbm/gal
Fluid Volume:	10 bbl

Fluid 2: Reactive Spacer
SUPER FLUSH

Fluid Density:	10 lbm/gal
Fluid Volume:	20 bbl

Fluid 3: Water Spacer
Fresh Water

Fluid Density:	8.34 lbm/gal
Fluid Volume:	10 bbl

Fluid 4: Foamed Lead Cement
ELASTISEAL (TM) SYSTEM
1.5 % FDP-C760-04 (Foamer)

Fluid Weight	14.30 lbm/gal
Slurry Yield:	1.47 ft^3/sk
Total Mixing Fluid:	6.41 Gal/sk
Top of Fluid:	4416 ft
Calculated Fill:	6055 ft
Volume:	284.71 bbl
Calculated Sacks:	795.89 sks
Proposed Sacks:	800 sks

Fluid 5: Tail Cement
ELASTICEM (TM) SYSTEM

Fluid Weight	14.30 lbm/gal
Slurry Yield:	1.47 ft^3/sk
Total Mixing Fluid:	6.40 Gal/sk
Top of Fluid:	10471 ft
Calculated Fill:	1867 ft
Volume:	87.73 bbl
Calculated Sacks:	335.32 sks
Proposed Sacks:	340 sks

Fluid 6: Water Spacer
Displacement

Fluid Density:	8.34 lbm/gal
Fluid Volume:	191.15 bbl

Fluid 7: Top Out Cement
Premium Cement
94 lbm/sk Premium Cement (Cement)
12 % Cal-Seal 60 (Accelerator)
3 % Calcium Chloride (Accelerator)

Fluid Weight	14.60 lbm/gal
Slurry Yield:	1.55 ft^3/sk
Total Mixing Fluid:	7.35 Gal/sk
Proposed Sacks:	200 sks

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Detailed Pumping Schedule

Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Estimated Avg Rate bbl/min	Downhole Volume
1	Spacer	Fresh Water	8.3		10 bbl
2	Spacer	SUPER FLUSH	10.0		20 bbl
3	Spacer	Fresh Water	8.3		10 bbl
4	Cement	ELASTISEAL SYSTEM	14.3		800 sks
5	Cement	ELASTISEAL SYSTEM	14.3		340 sks
6	Spacer	Displacement	8.3		191.15 bbl
7	Cement	Cap Cement	14.6		200 sks

Foam Output Parameter Summary:

Fluid #	Fluid Name	Unfoamed Liquid Volume	Beginning Density lbm/gal	Ending Density lbm/gal	Beginning Rate scf/bbl	Ending Rate scf/bbl
Stage 1						
4	ELASTISEAL SYSTEM	208.38bbl	11.0	11.0	236.2	589.1

Foam Design Specifications:

Foam Calculation Method: Constant Density
Backpressure: 75 psig
Bottom Hole Circulating Temp: 180 degF
Mud Outlet Temperature: 120 degF

Calculated Gas = 86691.0 scf
Additional Gas = 40000 scf
Total Gas = 126691.0 scf

RECEIVED October 14, 2009

API Well No: 43047397410000

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: ML-44317

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.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: UTE TRIBAL 5-32-14-20

2. NAME OF OPERATOR: WHITING OIL & GAS CORPORATION

9. API NUMBER: 43047397410000

3. ADDRESS OF OPERATOR: 1700 Broadway, Suite 2300 , Denver, CO, 80290 2300

PHONE NUMBER: 303 390-4095 Ext

9. FIELD and POOL or WILDCAT: FLAT ROCK

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0809 FNL 1529 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 32 Township: 14.0S Range: 20.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 11/15/2009	☐ ACIDIZE	✓ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
☐ SPUD REPORT Date of Spud:	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

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

Whiting Oil and Gas Corporation is requesting a change in the casing design for this well. They would like to change from a 4-1/2" production casing run in the Wingate to a 7" casing set in the Curtis with a liner into the Wingate. Please see the attached Summary, Drilling Program, Wellbore Design, and corrected directional and cementing plans showing the adjusted casing design.

Approved by the Utah Division of Oil, Gas and Mining

Date: November 05, 2009

By: Dustin Doucet

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Terri Hartle	435 896-5501	Admin/Regulatory (Western Land Services)
SIGNATURE N/A		**DATE** 10/29/2009

RECEIVED October 29, 2009

The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Sundry Conditions of Approval Well Number 43047397410000

9 5/8" Surface casing shall be cemented from setting depth back to the surface.

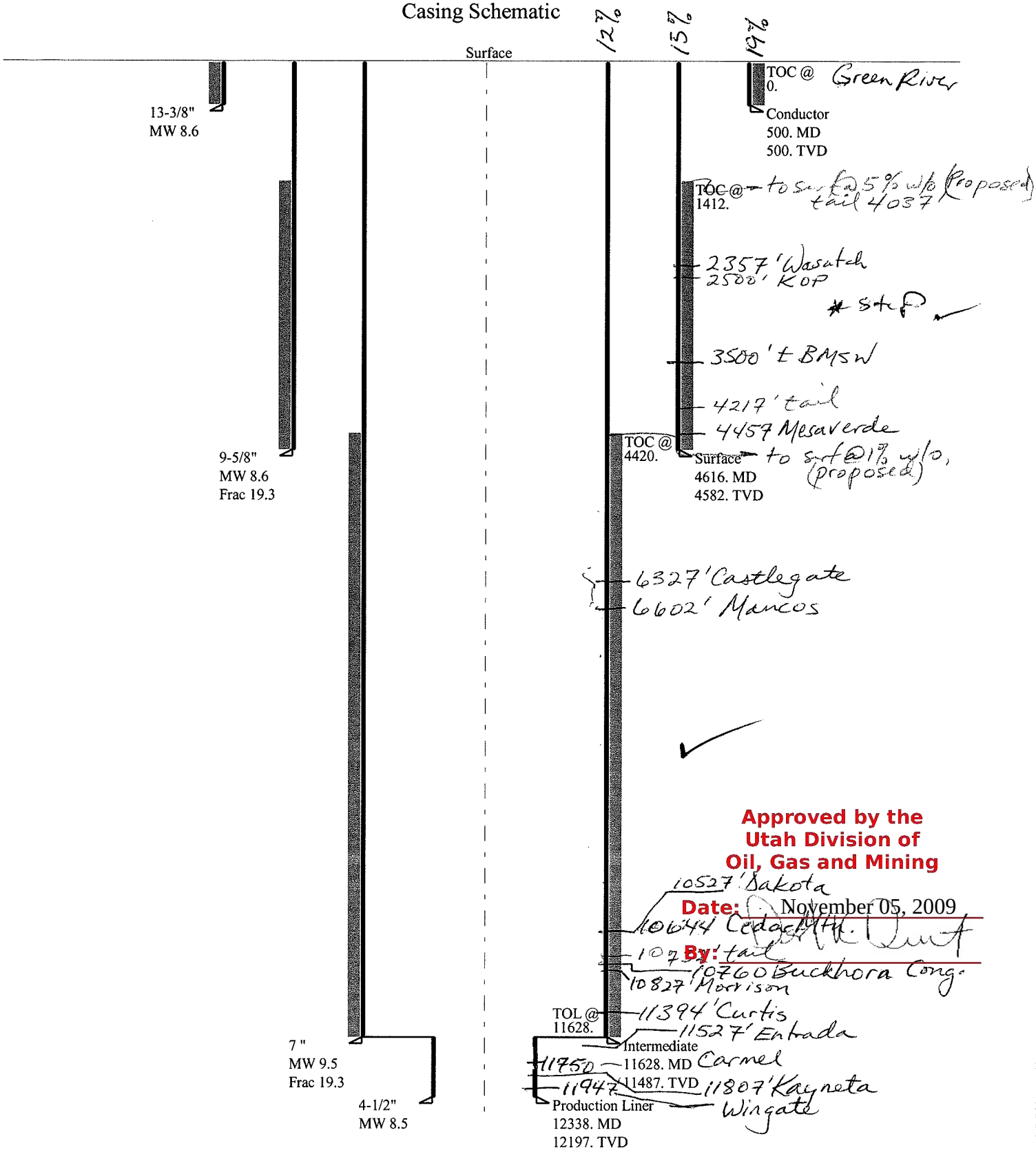
Approved by the
Utah Division of
Oil, Gas and Mining

Date: November 05, 2009

By:

43047397410000 Ute Tribal 5-32-14-20revB

Casing Schematic



Well name:	**43047397410000 Ute Tribal 5-32-14-20revB**
Operator:	**Whiting Oil and Gas**
String type:	Conductor
Project ID:	43-047-39741-0000
Location:	Uintah County

Design parameters:

Collapse
Mud weight: 8.600 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 163 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 223 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 buoyed weight.
Neutral point: 437 ft

Environment:
H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 82 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 300 ft

Cement top: Surface

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	500	13.375	48.00	H-40	ST&C	500	500	12.59	440.8

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	223	740	3.313	223	1730	7.75	21	322	15.35 J

Approved by the Utah Division of Oil, Gas and Mining

Date: November 05, 2009

By:

Prepared by: Helen Sadik-Macdonald, Div of Oil,Gas & Mining
Phone: 801-538-5357
FAX: 801-359-3940
Date: November 3,2009
Salt Lake City, Utah

formerly 2007-11 Miller Dyer Ute Tribal 3-
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.
Collapse is based on a vertical depth of 500 ft, a mud weight of 8.6 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:	**43047397410000 Ute Tribal 5-32-14-20revB**
Operator:	**Whiting Oil and Gas**
String type:	Surface
Project ID:	43-047-39741-0000
Location:	Uintah County

Design parameters:

Collapse

Mud weight:	8.600 ppg
Internal fluid density:	1.500 ppg

Burst

Max anticipated surface pressure:	3,142 psi
Internal gradient:	0.220 psi/ft
Calculated BHP	4,150 psi
Annular backup:	2.33 ppg

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 buoyed weight.
Neutral point: 4,021 ft

Environment:

H2S considered?	No
Surface temperature:	75 °F
Bottom hole temperature:	139 °F
Temperature gradient:	1.40 °F/100ft
Minimum section length:	300 ft
Cement top:	1,412 ft

Directional Info - Build & Drop

Kick-off point	2500 ft
Departure at shoe:	362 ft
Maximum dogleg:	2 °/100ft
Inclination at shoe:	11.38 °

Re subsequent strings:

Next setting depth:	11,487 ft
Next mud weight:	9.500 ppg
Next setting BHP:	5,669 psi
Fracture mud wt:	19.250 ppg
Fracture depth:	4,582 ft
Injection pressure:	4,582 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	4616	9.625	36.00	J-55	LT&C	4582	4616	8.796	2003.6

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	1690	2020	1.195	3595	3520	0.98	144	453	3.15 J

Approved by the Utah Division of Oil, Gas and Mining

Date: November 05, 2009

By: Dustin Doucet

Prepared by: Helen Sadik-Macdonald, Div of Oil,Gas & Mining
Phone: 801-538-5357
FAX: 801-359-3940
Date: November 3,2009
Salt Lake City, Utah

formerly 2007-11 Miller Dyer Ute Tribal 3-
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.
Collapse is based on a vertical depth of 4582 ft, a mud weight of 8.6 ppg An internal gradient of .078 psi/ft was used for collapse from TD to
Burst strength is not adjusted for tension.
Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

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

Well name:	**43047397410000 Ute Tribal 5-32-14-20revB**
Operator:	**Whiting Oil and Gas**
String type:	Intermediate
Project ID:	43-047-39741-0000
Location:	Uintah County

Design parameters:

Collapse
Mud weight: 9.500 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 3,142 psi
Internal gradient: 0.220 psi/ft
Calculated BHP 5,669 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 buoyed weight.
Neutral point: 9,974 ft

Environment:
H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 236 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 1,500 ft

Cement top: 4,420 ft

Directional Info - Build & Drop
Kick-off point 2500 ft
Departure at shoe: 1463 ft
Maximum dogleg: 2 °/100ft
Inclination at shoe: 0 °

Re subsequent strings:
Next setting depth: 12,197 ft
Next mud weight: 8.500 ppg
Next setting BHP: 5,386 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 11,487 ft
Injection pressure: 11,487 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	11628	7	29.00	L-80	LT&C	11487	11628	6.059	2425.3

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	5669	7020	1.238	5669	8160	1.44	285	587	2.06 J

Approved by the Utah Division of Oil, Gas and Mining

Date: November 05, 2009

By:

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Mining
Phone: 801-538-5357
FAX: 801-359-3940
Date: November 3,2009
Salt Lake City, Utah

formerly 2007-11 Miller Dyer Ute Tribal 3-
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.
Collapse is based on a vertical depth of 11487 ft, a mud weight of 9.5 ppg The casing is considered to be evacuated for collapse purposes.
Burst strength is not adjusted for tension.
Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

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

Well name:	**43047397410000 Ute Tribal 5-32-14-20revB**
Operator:	**Whiting Oil and Gas**
String type:	Production Liner
Project ID:	43-047-39741-0000
Location:	Uintah County

Design parameters:

Collapse
Mud weight: 8.500 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 2,702 psi
Internal gradient: 0.220 psi/ft
Calculated BHP 5,386 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 buoyed weight.
Neutral point: 12,244 ft

Environment:
H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 246 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 1,500 ft

Liner top: 11,628 ft
Directional Info - Build & Drop
Kick-off point 2500 ft
Departure at shoe: 1463 ft
Maximum dogleg: 0 °/100ft
Inclination at shoe: 0 °

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	738	4.5	11.60	P-110	LT&C	12197	12338	3.875	64.4

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	5386	7580	1.407	5386	10690	1.98	7	279	37.33 J

Approved by the Utah Division of Oil, Gas and Mining

Date: November 05, 2009

By:

Prepared by: Helen Sadik-Macdonald, Div of Oil,Gas & Mining
Phone: 801-538-5357
FAX: 801-359-3940
Date: November 3,2009
Salt Lake City, Utah

formerly 2007-11 Miller Dyer Ute Tribal 3-
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.
For this liner string, the top is rounded to the nearest 100 ft.Collapse is based on a vertical depth of 12197 ft, a mud weight of 8.5 ppg The Burst strength is not adjusted for tension.
Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

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

Whiting Oil & Gas Corp.
Ute Tribal 5-32-14-20 Well Plan
Directional Wingate well
Change Casing Design
October 23, 2009

Surface Location: NENW 32-T14S-R20E SLB&M
809' FNL & 1529' FWL
Uintah County, Utah

SUMMARY:

Whiting Oil & Gas Corp. is requesting a change in the casing design for the Ute Tribal 5-32-14-20. WOGC would like change from a 4-1/2" production casing run in the Wingate, to a 7" casing set in the Curtis with a liner into the Wingate. The design will be to drill the 2nd intermediate section with an 8-3/4" openhole to 50' above the Entrada in the Curtis formation. 7" casing will be set, a 6" openhole section will be drilled into the Entrada and Wingate formation. The section will be drilled with an aerated 3% KCl mud system. At TD, a liner packer system will be run with hydraulic packers to isolate the Entrada and Wingate formation. The Entrada formation will be probably be flowed naturally. The Wingate formation may need to be frac'd.

This change in casing design does not change the SHL, BHL or Directional plan.

DRILLING PROGRAM

1. ESTIMATED TOPS OF GEOLOGICAL MARKERS:

Ground Level 7,499' Estimated KB 7,527' (28')

Formation	TVD	Lithology	Hazard
Green River	28'	Oil Shale	Oil/Gas
Wasatch	2,357'	SS-SH	Oil/Gas
Mesaverde	4,457'	SS-SH	Oil
Castlegate SS	6,327'	Sandstone	Gas
Mancos	6,602'	SS-SH	Gas
Dakota	10,527'	Sandstone	Gas
Cedar Mtn	10,644'	Sandstone	Gas
Buckhorn Congl	10,760'	SS-SH	Gas
Morrison	10,827'	SS-SH	Gas
Curtis	11,394'	SS-SH	Gas
Entrada	11,527'	Sandstone	Gas
Carmel	11,750'	LS-SH	
Kayenta	11,807'	Sandstone	Gas
Wingate	11,947'	Sandstone	Gas
Total Depth	12,197'		

Bottom Hole Location: SWNW 32-T14S-R20E SLB&M
1980' FSL & 660' FWL
Uintah County, Utah

*See Attached Directional Well Plan

2. PRESSURE CONTROL EQUIPMENT

A. Type: 11” 5000 psi annular preventer
11” 5000 psi double ram hydraulic BOP
1 – Blind Ram
1 - Pipe Ram
Drilling Spool
Kill lines will be 2” x 5,000 psi working pressure
Choke lines will be 3” x 5,000 psi working pressure
5,000 psi Casing head

B. Testing Procedure:

The annular preventer will be pressure tested to 50% of stack rated working pressure for ten (10) minutes or until provisions of test are met, whichever is longer. The BOP, choke manifold, and related equipment will be pressure tested to approved BOP stack working pressure (if isolated from surface casing by a test plug) or to 70% of surface casing internal yield strength (if BOP is not isolated by a test plug). Pressure will be maintained for ten (10) minutes or until the requirements of the test are met, whichever is longer. At a minimum, the Annular and Blow-Out Preventer pressure tests will be performed:

1. When the BOPE is initially installed;
2. Whenever any seal subject to test pressure is broken;
3. Following related repairs; and
4. At thirty (30) day intervals.

Annular will be function tested weekly, and pipe & blind rams activated each trip, but not more than once per day. All BOP drills & tests will be recorded in IADC driller's log.

C. Choke Manifold Equipment:

All choke lines will be straight lines whenever possible at turns, tee blocks will be used or will be targeted with running tees, and will be anchored to prevent whip and vibration.

D. Accumulator:

Accumulator will have sufficient capacity to open hydraulically-controlled choke line valve (if so equipped), close all rams plus annular preventer, and retain a minimum of 200 psi above precharge on the closing manifold without the use of closing unit pumps. The fluid reservoir capacity will be double accumulator capacity and the fluid level will be maintained at manufacturer's recommendations. Accumulator precharge pressure test will be conducted prior to connecting the closing unit to the BOP stack.

E. Miscellaneous Information:

Choke manifold and BOP extension rods with hand wheels will be located outside rig sub-structure. Hydraulic BOP closing unit will be located at least twenty-five (25) feet from the wellhead but readily accessible to the driller. Exact locations and configurations of the hydraulic BOP closing unit will depend upon the particular rig contracted to drill this hole.
A flare line will be installed after the choke manifold with the discharge point of the flare line to a separate pit located at least 125 feet away from the wellbore and any existing production facilities.

3. PROPOSED CASING PROGRAM

Hole Size	Setting Depth (MD)	Casing Size	Wt./Ft.	Grade	Thread
17-1/2"	500'	13-3/8"	48.00	H-40	STC
12-1/4"	4,616'	9-5/8"	36.00	J-55	LTC
8-3/4"	11,628'	7"	29.00	L-80	LTC
6"	12,338'	4-1/2" Liner	11.60	P-110	LTC

*See Attached Liner Drawing

4. PROPOSED CEMENTING PROGRAM

SURFACE 500' MD: TOC Surface (100% Excess)

Single Stage: 395 sacks, Rockies LT

Top out Cement: 200 sacks, Premium Plus - Type III

Cement Properties	Slurry	Top out Cement
Slurry Weight (ppg)	13.5	14.5
Slurry Yield (cf/sack)	1.80	1.41

1st INTERMEDIATE 4,616' MD: TOC Surface (75% Excess, TOT: 4100' MD, TOL: 200' into surface casing)

Lead: 425 sacks Halliburton ECONOCEM SYSTEM

Tail: 200 sacks Halliburton Premium Cement

Cement Properties	Lead Slurry	Tail Slurry
Slurry Weight (ppg)	11.0	15.8
Slurry Yield (cf/sack)	3.81	1.15

2nd INTERMEDIATE 11,628' MD: TOC Surface (Capiler + 25% Excess, TOT: 10,473' MD above the Dakota Silt, TOL: 200' into 9-5/8" casing)

Lead: 470 sacks Halliburton Foamed Lead Cement Elastiseal System

Tail: 135 sacks Halliburton Elastiseal System

Cement Properties	Lead Slurry	Tail Slurry
Slurry Weight (ppg)	14.30	14.30
Slurry Yield (cf/sack)	1.47	1.47

Foam Design Specifications:

Foam Calculation Method: Constant Density
Backpressure: 75 psig
Bottom Hole Circulating Temp: 180 degF
Mud Outlet Temperature: 120 degF

Calculated Gas = 67212.7 scf
Additional Gas = 40000 scf
Total Gas = 107212.7 scf

5. MUD PROGRAM

Depth (MD)	Mud System	MW	PV	YP	FL
0 - 500	Air	N/A	N/A	N/A	N/A
500' – 4,616'	Spud Mud	8.4 – 8.6	0 - 15	0 - 10	N/C
4,616' – 11,628'	3% KCL / Polymer	8.6 – 9.5	5 - 10	5 - 15	>8
11,628' - TD	Aerated 3% KCl	8.5	5 - 10	5 - 15	>6

Surface hole (0' – 500') will be drilled with an Air Drilling Rig using an air/foam package. Air/foam package will consist of compressors, booster, and foam unit. Package will compress 3200 SCFM of and air and a fluid package capable of pumping 60 gpm nominal, of fluid to 600 psig. This same package will move 2100 SCFM two staged @ 1500 psig.

Special Drilling Operations

- Rotating Head
- Blooie line discharge 100 feet from well bore and securely anchored
- Straight run on blooie line
- Compressors located in the opposite direction from the blooie line
- Compressors located a minimum of 100 feet the well bore

Production Hole (11,628' – 12,338' MD) will be drilled with an aerated 3% KCl mud system. Air package will consist of compressors, booster, and foam unit. Package will compress 3200 SCFM of and air and a fluid package capable of pumping 60 gpm nominal, of fluid to 600 psig. This same package will move 2100 SCFM two staged @ 1500 psig

6. Testing, Logging and Core Programs

Cores: None planned
DST: None planned

Surveys: Per Directional Plan

Mud Logger: Surface

Samples: 30' samples from surface to Entrada
10' samples to TD

Open Hole Logging Program: Triple Combo TD to 1st Intermediate

7. ANTICIPATED ABNORMAL PRESSURES OR TEMPERATURES:

No H_2S gas is anticipated.

Maximum pressure at the base of the Curtis, 4,995 psi (0.433 psi/ft normal pressure gradient) at 11,537' TVD.

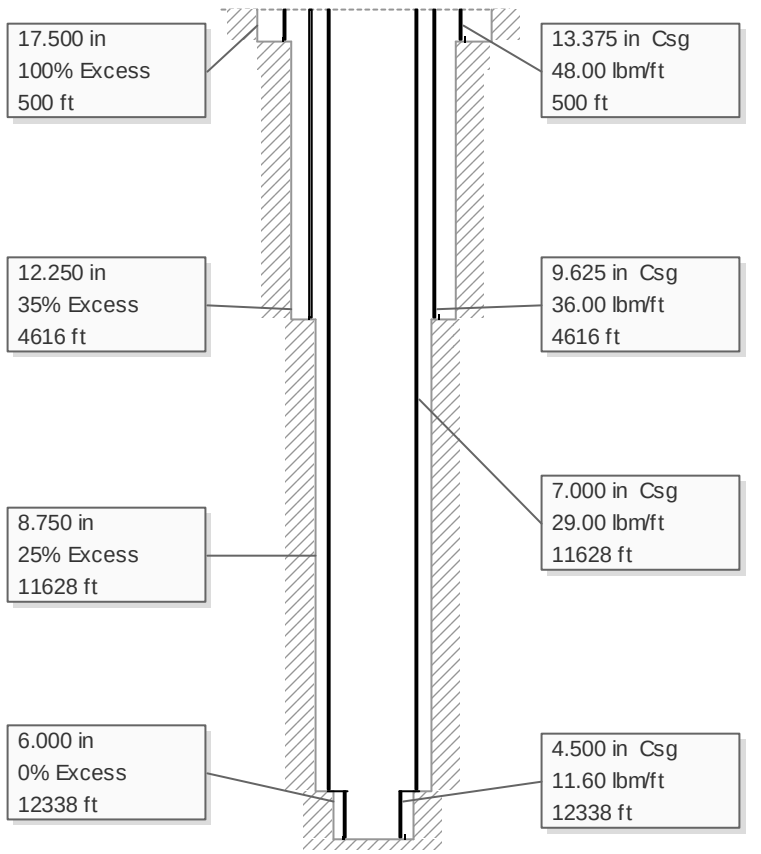
Anticipated bottomhole pressure at TD is 4,269 psi (0.35 psi/ft) at 12,197' TVD (6.73 ppg equivalent).

Normal BHT calculated at 1.25°F/100' with a 65°F surface Temperature.
BHT @ 12,197' TVD = 217°F.

8. ANTICIPATED STARTING DATE AND DURATION:

Dirt work startup:	Location Built
Spud:	October 2009
Duration:	35 - 40 days

Ute Tribal 5-32-14-20 Wingate
Flat Rock Field
Uintah County, Utah
Wingate Directional Well
Entrada Wingate Liner Completion
SHL: NENW 32-14S-20E
BHL: SWNW 32-14S-20E
Wellbore Design



i-Handbook* - *a mark of Schlumberger

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Whiting Petroleum Corporation

Uintah County, UT
Section 32-T14S-R20E
UTE Tribal 5-32-14-20
Well

Plan: Plan #1

Standard Planning Report

22 October, 2009

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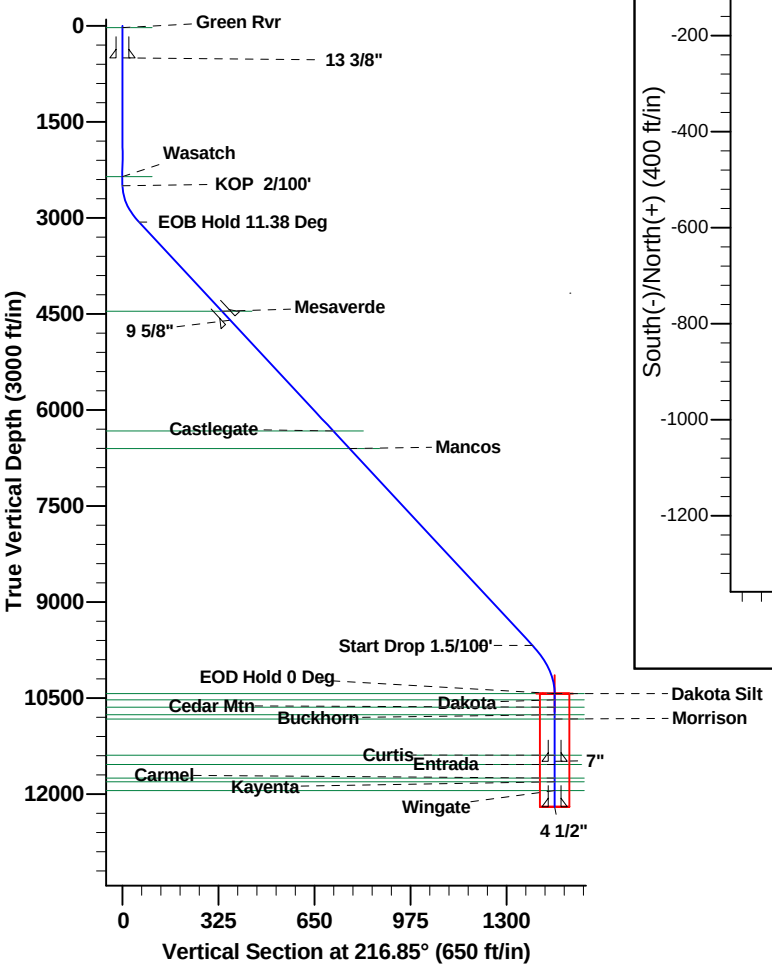
Whiting Petroleum Corporation
UTE Tribal 5-32-14-20
Uintah County, UT
Plan #1

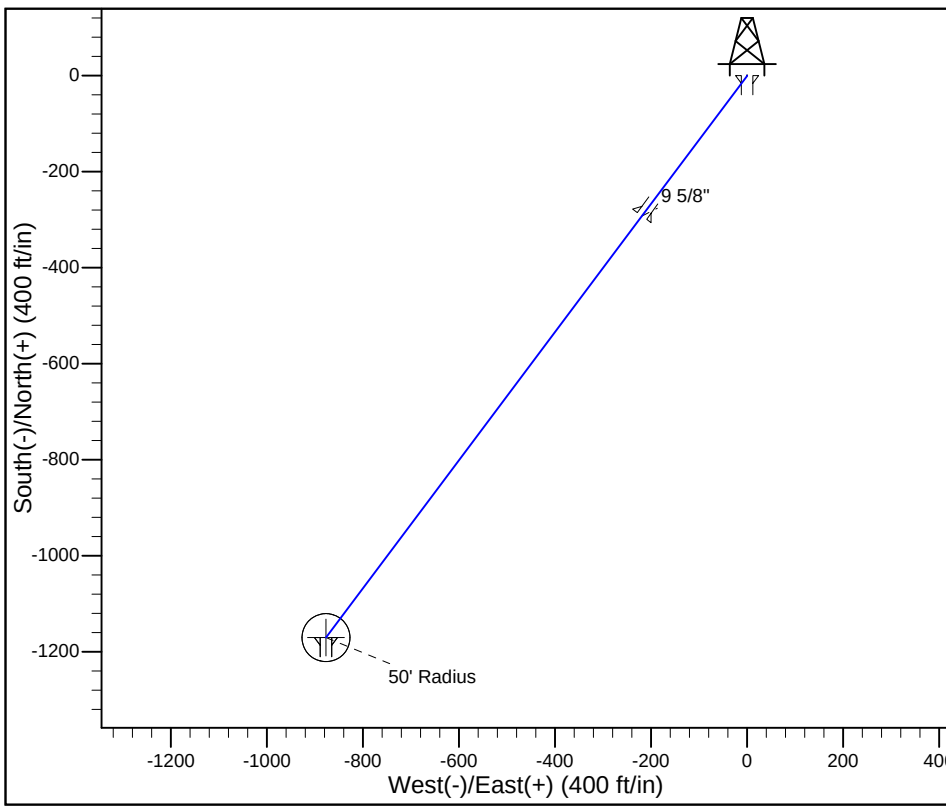
PROJECT DETAILS: Uintah County, UT	
Geodetic System:	US State Plane 1983
Datum:	North American Datum 1983
Ellipsoid:	GRS 1980
Zone:	Utah Central Zone
System Datum:	Mean Sea Level

T M

Azimuths to True North
Magnetic North: 11.29°

Magnetic Field
Strength: 52238.2snT
Dip Angle: 65.52°
Date: 2009/10/04
Model: IGRF200510





SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0
2	2500.0	0.00	0.00	2500.0	0.0	0.0	0.00	0.00	0.0
3	3069.1	11.38	216.85	3065.4	-45.1	-33.8	2.00	216.85	56.3
4	9814.6	11.38	216.85	9678.2	-1110.4	-832.1	0.00	0.00	1387.6
5	10573.4	0.00	0.00	10432.0	-1170.5	-877.1	1.50	180.00	1462.7
6	12338.4	0.00	0.00	12197.0	-1170.5	-877.1	0.00	0.00	1462.7

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
28.0	28.0	Green Rvr
2357.0	2357.0	Wasatch
4457.0	4488.7	Mesaverde
6327.0	6396.2	Castlegate
6602.0	6676.7	Mancos
10432.0	10573.4	Dakota Silt
10527.0	10668.4	Dakota
10644.0	10785.4	Cedar Mtn
10760.0	10901.4	Buckhorn
10827.0	10968.4	Morrison
11394.0	11535.4	Curtis
11537.0	11678.4	Entrada
11750.0	11891.4	Carmel
11807.0	11948.4	Kayenta
11947.0	12088.4	Wingate

5-32-14-20

RECEIVED October 29, 2009

Database:	EDM 2003.16 Single User Db	**Local Co-ordinate Reference:**	Well UTE Tribal 5-32-14-20
Company:	Whiting Petroleum Corporation	**TVD Reference:**	WELL @ 7527.0ft (Bronco Rig)
Project:	Uintah County, UT	**MD Reference:**	WELL @ 7527.0ft (Bronco Rig)
Site:	Section 32-T14S-R20E	**North Reference:**	True
Well:	UTE Tribal 5-32-14-20	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Well		
Design:	Plan #1		

Project Uintah County, UT

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Utah Central Zone		

Site Section 32-T14S-R20E

Site Position:		**Northing:**	7,013,846.02 ft	**Latitude:**	39° 33' 39.240 N
From:	Lat/Long	**Easting:**	2,145,484.00 ft	**Longitude:**	109° 42' 30.161 W
Position Uncertainty:	0.0 ft	**Slot Radius:**	"	**Grid Convergence:**	1.15 °

Well UTE Tribal 5-32-14-20

Well Position	**+N/-S**	0.0 ft	**Northing:**	7,013,837.29 ft	**Latitude:**	39° 33' 39.020 N
	+E/-W	0.0 ft	**Easting:**	2,146,160.24 ft	**Longitude:**	109° 42' 21.530 W
Position Uncertainty		0.0 ft	**Wellhead Elevation:**	7,527.0 ft	**Ground Level:**	7,499.0 ft

Wellbore Well

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	2009/10/04	11.29	65.52	52,238

Design Plan #1

Audit Notes:

Version:		**Phase:**	PROTOTYPE	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	216.85

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,069.1	11.38	216.85	3,065.4	-45.1	-33.8	2.00	2.00	0.00	216.85	
9,814.6	11.38	216.85	9,678.2	-1,110.4	-832.1	0.00	0.00	0.00	0.00	
10,573.4	0.00	0.00	10,432.0	-1,170.5	-877.1	1.50	-1.50	0.00	180.00	5-32-14-20
12,338.4	0.00	0.00	12,197.0	-1,170.5	-877.1	0.00	0.00	0.00	0.00	

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Project:	Uintah County, UT	**MD Reference:**	WELL @ 7527.0ft (Bronco Rig)
Site:	Section 32-T14S-R20E	**North Reference:**	True
Well:	UTE Tribal 5-32-14-20	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Well		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
28.0	0.00	0.00	28.0	0.0	0.0	0.0	0.00	0.00	0.00
Green Rvr									
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
13 3/8"									
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,357.0	0.00	0.00	2,357.0	0.0	0.0	0.0	0.00	0.00	0.00
Wasatch									
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP 2/100'									
2,600.0	2.00	216.85	2,600.0	-1.4	-1.0	1.7	2.00	2.00	0.00
2,700.0	4.00	216.85	2,699.8	-5.6	-4.2	7.0	2.00	2.00	0.00
2,800.0	6.00	216.85	2,799.5	-12.6	-9.4	15.7	2.00	2.00	0.00
2,900.0	8.00	216.85	2,898.7	-22.3	-16.7	27.9	2.00	2.00	0.00
3,000.0	10.00	216.85	2,997.5	-34.8	-26.1	43.5	2.00	2.00	0.00
3,069.1	11.38	216.85	3,065.4	-45.1	-33.8	56.3	2.00	2.00	0.00
EOB Hold 11.38 Deg									
3,100.0	11.38	216.85	3,095.7	-50.0	-37.4	62.4	0.00	0.00	0.00
3,200.0	11.38	216.85	3,193.7	-65.8	-49.3	82.2	0.00	0.00	0.00
3,300.0	11.38	216.85	3,291.7	-81.6	-61.1	101.9	0.00	0.00	0.00
3,400.0	11.38	216.85	3,389.8	-97.3	-72.9	121.6	0.00	0.00	0.00
3,500.0	11.38	216.85	3,487.8	-113.1	-84.8	141.4	0.00	0.00	0.00
3,600.0	11.38	216.85	3,585.8	-128.9	-96.6	161.1	0.00	0.00	0.00
3,700.0	11.38	216.85	3,683.9	-144.7	-108.5	180.9	0.00	0.00	0.00
3,800.0	11.38	216.85	3,781.9	-160.5	-120.3	200.6	0.00	0.00	0.00
3,900.0	11.38	216.85	3,879.9	-176.3	-132.1	220.3	0.00	0.00	0.00
4,000.0	11.38	216.85	3,978.0	-192.1	-144.0	240.1	0.00	0.00	0.00
4,100.0	11.38	216.85	4,076.0	-207.9	-155.8	259.8	0.00	0.00	0.00
4,200.0	11.38	216.85	4,174.0	-223.7	-167.6	279.5	0.00	0.00	0.00
4,300.0	11.38	216.85	4,272.1	-239.5	-179.5	299.3	0.00	0.00	0.00
4,400.0	11.38	216.85	4,370.1	-255.3	-191.3	319.0	0.00	0.00	0.00

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Company:	Whiting Petroleum Corporation	**TVD Reference:**	WELL @ 7527.0ft (Bronco Rig)
Project:	Uintah County, UT	**MD Reference:**	WELL @ 7527.0ft (Bronco Rig)
Site:	Section 32-T14S-R20E	**North Reference:**	True
Well:	UTE Tribal 5-32-14-20	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Well		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,488.7	11.38	216.85	4,457.0	-269.3	-201.8	336.5	0.00	0.00	0.00
Mesaverde									
4,500.0	11.38	216.85	4,468.1	-271.1	-203.1	338.7	0.00	0.00	0.00
4,600.0	11.38	216.85	4,566.2	-286.9	-215.0	358.5	0.00	0.00	0.00
4,634.5	11.38	216.85	4,600.0	-292.3	-219.0	365.3	0.00	0.00	0.00
9 5/8"									
4,700.0	11.38	216.85	4,664.2	-302.7	-226.8	378.2	0.00	0.00	0.00
4,800.0	11.38	216.85	4,762.2	-318.5	-238.6	397.9	0.00	0.00	0.00
4,900.0	11.38	216.85	4,860.3	-334.2	-250.5	417.7	0.00	0.00	0.00
5,000.0	11.38	216.85	4,958.3	-350.0	-262.3	437.4	0.00	0.00	0.00
5,100.0	11.38	216.85	5,056.3	-365.8	-274.1	457.1	0.00	0.00	0.00
5,200.0	11.38	216.85	5,154.4	-381.6	-286.0	476.9	0.00	0.00	0.00
5,300.0	11.38	216.85	5,252.4	-397.4	-297.8	496.6	0.00	0.00	0.00
5,400.0	11.38	216.85	5,350.4	-413.2	-309.6	516.4	0.00	0.00	0.00
5,500.0	11.38	216.85	5,448.5	-429.0	-321.5	536.1	0.00	0.00	0.00
5,600.0	11.38	216.85	5,546.5	-444.8	-333.3	555.8	0.00	0.00	0.00
5,700.0	11.38	216.85	5,644.5	-460.6	-345.1	575.6	0.00	0.00	0.00
5,800.0	11.38	216.85	5,742.6	-476.4	-357.0	595.3	0.00	0.00	0.00
5,900.0	11.38	216.85	5,840.6	-492.2	-368.8	615.0	0.00	0.00	0.00
6,000.0	11.38	216.85	5,938.6	-508.0	-380.6	634.8	0.00	0.00	0.00
6,100.0	11.38	216.85	6,036.7	-523.8	-392.5	654.5	0.00	0.00	0.00
6,200.0	11.38	216.85	6,134.7	-539.6	-404.3	674.2	0.00	0.00	0.00
6,300.0	11.38	216.85	6,232.7	-555.4	-416.2	694.0	0.00	0.00	0.00
6,396.2	11.38	216.85	6,327.0	-570.5	-427.5	713.0	0.00	0.00	0.00
Castlegate									
6,400.0	11.38	216.85	6,330.8	-571.1	-428.0	713.7	0.00	0.00	0.00
6,500.0	11.38	216.85	6,428.8	-586.9	-439.8	733.4	0.00	0.00	0.00
6,600.0	11.38	216.85	6,526.8	-602.7	-451.7	753.2	0.00	0.00	0.00
6,676.7	11.38	216.85	6,602.0	-614.8	-460.7	768.3	0.00	0.00	0.00
Mancos									
6,700.0	11.38	216.85	6,624.9	-618.5	-463.5	772.9	0.00	0.00	0.00
6,800.0	11.38	216.85	6,722.9	-634.3	-475.3	792.7	0.00	0.00	0.00
6,900.0	11.38	216.85	6,820.9	-650.1	-487.2	812.4	0.00	0.00	0.00
7,000.0	11.38	216.85	6,919.0	-665.9	-499.0	832.1	0.00	0.00	0.00
7,100.0	11.38	216.85	7,017.0	-681.7	-510.8	851.9	0.00	0.00	0.00
7,200.0	11.38	216.85	7,115.0	-697.5	-522.7	871.6	0.00	0.00	0.00
7,300.0	11.38	216.85	7,213.1	-713.3	-534.5	891.3	0.00	0.00	0.00
7,400.0	11.38	216.85	7,311.1	-729.1	-546.3	911.1	0.00	0.00	0.00
7,500.0	11.38	216.85	7,409.1	-744.9	-558.2	930.8	0.00	0.00	0.00
7,600.0	11.38	216.85	7,507.2	-760.7	-570.0	950.5	0.00	0.00	0.00
7,700.0	11.38	216.85	7,605.2	-776.5	-581.8	970.3	0.00	0.00	0.00
7,800.0	11.38	216.85	7,703.2	-792.3	-593.7	990.0	0.00	0.00	0.00
7,900.0	11.38	216.85	7,801.3	-808.0	-605.5	1,009.7	0.00	0.00	0.00
8,000.0	11.38	216.85	7,899.3	-823.8	-617.3	1,029.5	0.00	0.00	0.00
8,100.0	11.38	216.85	7,997.3	-839.6	-629.2	1,049.2	0.00	0.00	0.00
8,200.0	11.38	216.85	8,095.4	-855.4	-641.0	1,068.9	0.00	0.00	0.00
8,300.0	11.38	216.85	8,193.4	-871.2	-652.8	1,088.7	0.00	0.00	0.00
8,400.0	11.38	216.85	8,291.4	-887.0	-664.7	1,108.4	0.00	0.00	0.00
8,500.0	11.38	216.85	8,389.4	-902.8	-676.5	1,128.2	0.00	0.00	0.00
8,600.0	11.38	216.85	8,487.5	-918.6	-688.3	1,147.9	0.00	0.00	0.00
8,700.0	11.38	216.85	8,585.5	-934.4	-700.2	1,167.6	0.00	0.00	0.00
8,800.0	11.38	216.85	8,683.5	-950.2	-712.0	1,187.4	0.00	0.00	0.00
8,900.0	11.38	216.85	8,781.6	-966.0	-723.9	1,207.1	0.00	0.00	0.00

RECEIVED October 29, 2009

Database:	EDM 2003.16 Single User Db	**Local Co-ordinate Reference:**	Well UTE Tribal 5-32-14-20
Company:	Whiting Petroleum Corporation	**TVD Reference:**	WELL @ 7527.0ft (Bronco Rig)
Project:	Uintah County, UT	**MD Reference:**	WELL @ 7527.0ft (Bronco Rig)
Site:	Section 32-T14S-R20E	**North Reference:**	True
Well:	UTE Tribal 5-32-14-20	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Well		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,000.0	11.38	216.85	8,879.6	-981.8	-735.7	1,226.8	0.00	0.00	0.00
9,100.0	11.38	216.85	8,977.6	-997.6	-747.5	1,246.6	0.00	0.00	0.00
9,200.0	11.38	216.85	9,075.7	-1,013.4	-759.4	1,266.3	0.00	0.00	0.00
9,300.0	11.38	216.85	9,173.7	-1,029.2	-771.2	1,286.0	0.00	0.00	0.00
9,400.0	11.38	216.85	9,271.7	-1,045.0	-783.0	1,305.8	0.00	0.00	0.00
9,500.0	11.38	216.85	9,369.8	-1,060.7	-794.9	1,325.5	0.00	0.00	0.00
9,600.0	11.38	216.85	9,467.8	-1,076.5	-806.7	1,345.2	0.00	0.00	0.00
9,700.0	11.38	216.85	9,565.8	-1,092.3	-818.5	1,365.0	0.00	0.00	0.00
9,800.0	11.38	216.85	9,663.9	-1,108.1	-830.4	1,384.7	0.00	0.00	0.00
9,814.6	11.38	216.85	9,678.2	-1,110.4	-832.1	1,387.6	0.00	0.00	0.00
Start Drop 1.5/100'									
9,900.0	10.10	216.85	9,762.1	-1,123.2	-841.6	1,403.5	1.50	-1.50	0.00
10,000.0	8.60	216.85	9,860.8	-1,136.2	-851.4	1,419.8	1.50	-1.50	0.00
10,100.0	7.10	216.85	9,959.8	-1,147.1	-859.6	1,433.4	1.50	-1.50	0.00
10,200.0	5.60	216.85	10,059.2	-1,156.0	-866.2	1,444.5	1.50	-1.50	0.00
10,300.0	4.10	216.85	10,158.8	-1,162.7	-871.3	1,452.9	1.50	-1.50	0.00
10,400.0	2.60	216.85	10,258.7	-1,167.4	-874.8	1,458.8	1.50	-1.50	0.00
10,500.0	1.10	216.85	10,358.6	-1,170.0	-876.7	1,462.0	1.50	-1.50	0.00
10,573.4	0.00	0.00	10,432.0	-1,170.5	-877.1	1,462.7	1.50	-1.50	0.00
EOD Hold 0 Deg - Dakota Silt - 5-32-14-20									
10,600.0	0.00	0.00	10,458.6	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
10,668.4	0.00	0.00	10,527.0	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
Dakota									
10,700.0	0.00	0.00	10,558.6	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
10,785.4	0.00	0.00	10,644.0	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
Cedar Mtn									
10,800.0	0.00	0.00	10,658.6	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
10,900.0	0.00	0.00	10,758.6	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
10,901.4	0.00	0.00	10,760.0	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
Buckhorn									
10,968.4	0.00	0.00	10,827.0	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
Morrison									
11,000.0	0.00	0.00	10,858.6	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
11,100.0	0.00	0.00	10,958.6	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
11,200.0	0.00	0.00	11,058.6	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
11,300.0	0.00	0.00	11,158.6	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
11,400.0	0.00	0.00	11,258.6	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
11,500.0	0.00	0.00	11,358.6	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
11,535.4	0.00	0.00	11,394.0	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
Curtis									
11,600.0	0.00	0.00	11,458.6	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
11,628.0	0.00	0.00	11,486.6	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
7"									
11,678.4	0.00	0.00	11,537.0	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
Entrada									
11,700.0	0.00	0.00	11,558.6	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
11,800.0	0.00	0.00	11,658.6	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
11,891.4	0.00	0.00	11,750.0	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
Carmel									
11,900.0	0.00	0.00	11,758.6	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
11,948.4	0.00	0.00	11,807.0	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
Kayenta									

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Company:	Whiting Petroleum Corporation	**TVD Reference:**	WELL @ 7527.0ft (Bronco Rig)
Project:	Uintah County, UT	**MD Reference:**	WELL @ 7527.0ft (Bronco Rig)
Site:	Section 32-T14S-R20E	**North Reference:**	True
Well:	UTE Tribal 5-32-14-20	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Well		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
12,000.0	0.00	0.00	11,858.6	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
12,088.4	0.00	0.00	11,947.0	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
Wingate									
12,100.0	0.00	0.00	11,958.6	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
12,200.0	0.00	0.00	12,058.6	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
12,300.0	0.00	0.00	12,158.6	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00
12,338.4	0.00	0.00	12,197.0	-1,170.5	-877.1	1,462.7	0.00	0.00	0.00

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
5-32-14-20 - plan hits target - Circle (radius 50.0)	0.00	0.00	10,432.0	-1,170.5	-877.1	7,012,649.39	2,145,306.75	39° 33' 27.450 N	109° 42' 32.730 W

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
500.0	500.0	13 3/8"	13-3/8	17-1/2
4,634.5	4,600.0	9 5/8"	9-5/8	12-1/4
11,628.0	11,486.6	7"	7	7-7/8
12,338.4	12,197.0	4 1/2"	4-1/2	6

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
10,573.4	10,432.0	Dakota Silt		0.00	
10,668.4	10,527.0	Dakota		0.00	
10,901.4	10,760.0	Buckhorn		0.00	
11,891.4	11,750.0	Carmel		0.00	
11,948.4	11,807.0	Kayenta		0.00	
6,676.7	6,602.0	Mancos		0.00	
11,535.4	11,394.0	Curtis		0.00	
6,396.2	6,327.0	Castlegate		0.00	
4,488.7	4,457.0	Mesaverde		0.00	
11,678.4	11,537.0	Entrada		0.00	
12,088.4	11,947.0	Wingate		0.00	
10,968.4	10,827.0	Morrison		0.00	
2,357.0	2,357.0	Wasatch		0.00	
28.0	28.0	Green Rvr		0.00	
10,785.4	10,644.0	Cedar Mtn		0.00	

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Database:	EDM 2003.16 Single User Db	**Local Co-ordinate Reference:**	Well UTE Tribal 5-32-14-20
Company:	Whiting Petroleum Corporation	**TVD Reference:**	WELL @ 7527.0ft (Bronco Rig)
Project:	Uintah County, UT	**MD Reference:**	WELL @ 7527.0ft (Bronco Rig)
Site:	Section 32-T14S-R20E	**North Reference:**	True
Well:	UTE Tribal 5-32-14-20	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Well		
Design:	Plan #1		

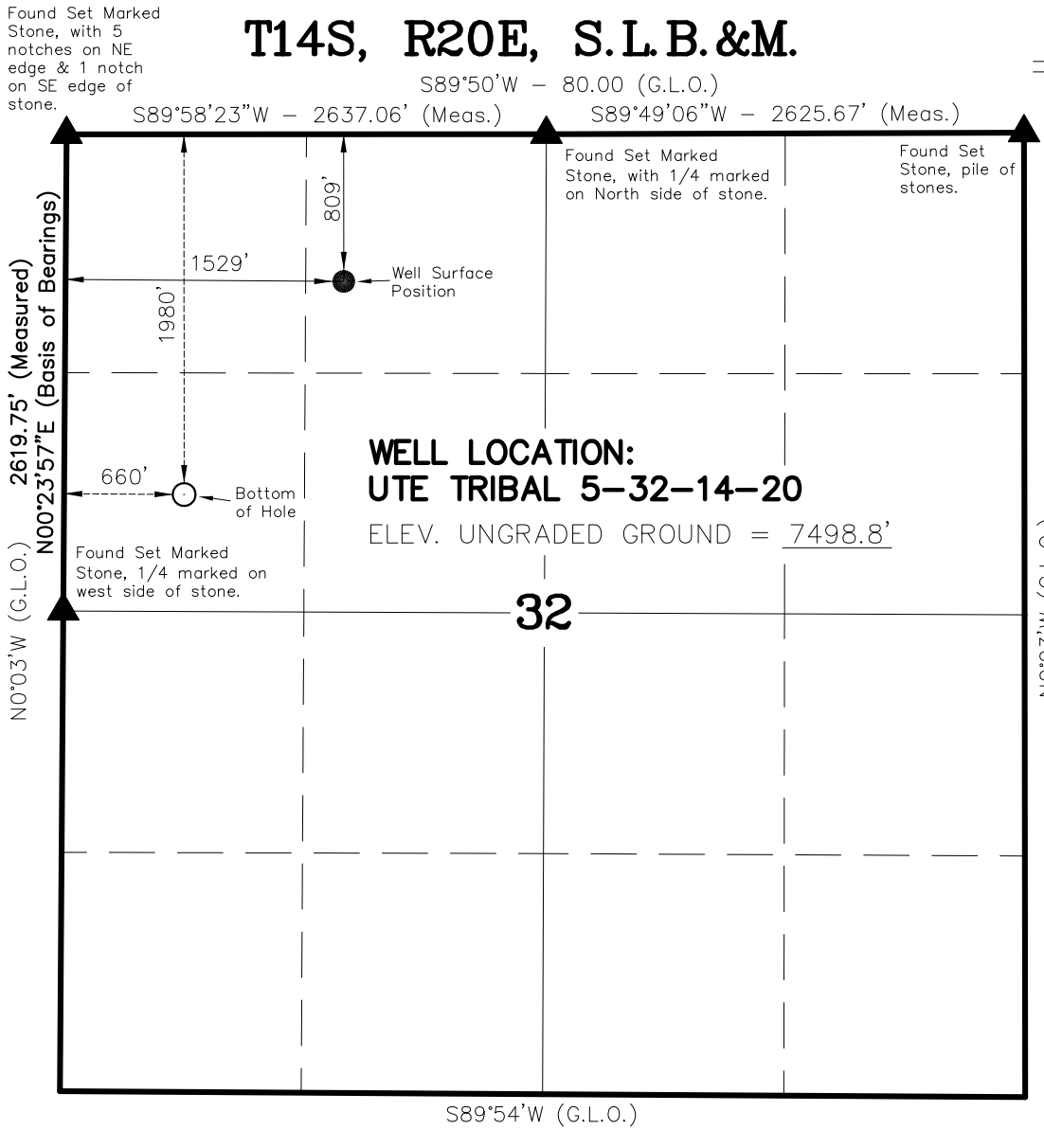
Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
2,500.0	2,500.0	0.0	0.0	KOP 2/100'
3,069.1	3,065.4	-45.1	-33.8	EOB Hold 11.38 Deg
9,814.6	9,678.2	-1,110.4	-832.1	Start Drop 1.5/100'
10,573.4	10,432.0	-1,170.5	-877.1	EOD Hold 0 Deg

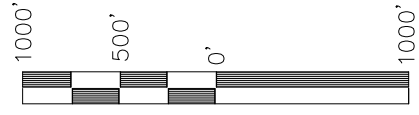
RECEIVED October 29, 2009

T14S, R20E, S.L.B.&M.

WHITING OIL AND GAS CORPORATION



WELL LOCATION, UTE TRIBAL 5-32-14-20, LOCATED AS SHOWN IN THE SW 1/4 NW 1/4 OF SECTION 32, T14S, R20E, S.L.B.&M. UINTAH COUNTY, UTAH.



NOTES:

1. Well footages are measured at right angles to the Section Lines.
2. G.L.O. distances are shown in feet or chains. 1 chain = 66 feet.
3. The Bottom of hole bears S36°50'10"W 1463.53' from the Surface Position.
4. Bearings are based on Global Positioning Satellite observations.
5. BASIS OF ELEVATION IS BENCH MARK 60 WF 1952 LOCATED IN THE SW 1/4 OF SECTION 35, T14S, R20E, S.L.B.&M. THE ELEVATION OF THIS BENCH MARK IS SHOWN ON THE FLAT ROCK MESA 7.5 MIN. QUADRANGLE AS BEING 7363'.

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR
REGISTRATION NO. 362251
STATE OF UTAH

REGISTERED LAND SURVEYOR No.362251 KOLBY R. KAY STATE OF UTAH

▲ = SECTION CORNERS LOCATED

UTE TRIBAL 5-32-14-20
(Bottom Hole) NAD 83 Autonomous
LATITUDE = 39° 33' 27.45"
LONGITUDE = 109° 42' 32.73"

UTE TRIBAL 5-32-14-20
(Surface Position) NAD 83 Autonomous
LATITUDE = 39° 33' 39.02"
LONGITUDE = 109° 42' 21.53"

TIMBERLINE (435) 789-1365
ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST – VERNAL, UTAH 84078

DATE SURVEYED: 09-07-07	SURVEYED BY: B.J.S.	SHEET 2 OF 11
DATE DRAWN: 09-25-07	DRAWN BY: M.W.W.	
SCALE: 1" = 1000'	Date Last Revised: 08-03-09	

RECEIVED October 29, 2009

WHITING OIL AND GAS CORPORATION

WELL PAD INTERFERENCE PLAT

UTE TRIBAL 5-32-14-20

BASIS OF ELEVATION IS BENCH MARK 60 WF 1952 LOCATED IN THE SW 1/4 OF SECTION 35, T14S, R20E, S.L.B.&M. THE ELEVATION OF THIS BENCH MARK IS SHOWN ON THE FLAT ROCK MESA 7.5 MIN. QUADRANGLE AS BEING 7363'.

BASIS OF BEARINGS IS THE WEST LINE OF THE NW 1/4 OF SECTION 32, T14S, R20E, S.L.B.&M. WHICH IS TAKEN FROM GLOBAL POSITIONING SATELLITE OBSERVATIONS TO BEAR N00°23'57"E.

N

Existing Road

SURFACE POSITION FOOTAGES:

UTE TRIBAL 5-32-14-20
809' FNL & 1529' FWL

BOTTOM HOLE FOOTAGES

UTE TRIBAL 5-32-14-20
1980' FNL & 660' FWL

PROPOSED GRADED GROUND ELEVATION OF PAD IS 7497.2'.

N88°41'21"W

UTE TRIBAL 5-32-14-20

S36°50'10"W - 1463.53' (To Bottom Hole)

LATITUDE & LONGITUDE
Surface Position - (NAD 83) Autonomous

WELL	N. LATITUDE	W. LONGITUDE
5-32-14-20	39°33'39.02"	109°42'21.53"

LATITUDE & LONGITUDE
Bottom Hole - (NAD 83) Autonomous

WELL	N. LATITUDE	W. LONGITUDE
5-32-14-20	39°33'27.45"	109°42'32.73"

RELATIVE COORDINATES
From Surface Position to Bottom Hole

WELL	NORTH	EAST
5-32-14-20	-1,171'	-877'

60' 30' 0' 60'

SCALE

Section 32, T14S, R20E, S.L.B.&M. | Qtr/Qtr Location: NE NW (Surface)

Date Surveyed: 09-07-07	Date Drawn: 08-04-09	Date Last Revision:
Surveyed By: B.J.S.	Drawn By: M.W.W.	Scale: 1" = 60'

Timberline Engineering & Land Surveying, Inc.
(435) 789-1365
209 NORTH 300 WEST VERNAL, UTAH 84078

RECEIVED October 29, 2009

RECOMMENDED BY				
Central Rockies				
REVISIONS:				
1	Updated TD to Wingate	DATE:	10/02/09	
2		DATE:		

WHITING PETROLEUM CORP.
1700 BROADWAY Suite 2300
Denver. CO 80290
303-837-1661

WELL INFORMATION				
API:	43-047-39741-00		**AFE:**	
WELL NAME:	UTE TRIBAL 5-32-14-20		**ACQUISITION:**	CEA
PROSPECT:	FLAT ROCK		**RESERVE CATEGORY:**	
SURFACE LOCATION:	NENW 32 14S 20E		**SURFACE LONG, LAT:**	-109.7052200, 39.5609000
SURFACE FOOTAGE:	809 FNL 1529 FWL		**BOTTOM HOLE LONG, LAT:**	-109.7083781, 39.5577005
BOTTOM HOLE LOCATION:	SWNW 32 14S 20E		**SURVEYED ELEVATION (GR):**	7,499
BOTTOM HOLE FOOTAGE:	1980 FNL 660 FWL		**HEIGHT TO KB:**	28
COUNTY:	Uintah		**ACTUAL ELEV. (KB):**	7,527
STATE:	UT		**TVD (if horizontal well):**	ft.
LOCATION MAY BE MOVED:			**TMD (if horizontal well):**	ft.
PROPOSED TOTAL DEPTH (TVD):	12,197		**FORMATION AT TD:**	Wingate

FORMATION	TOP - TVD	TOP - TVDSS	INTVL	CORE	LITHOLOGY	GEOLOGIC HAZARDS
Green River Fm @ Surface	28	7,499	2,329		Oil Shale	oil and/or gas anticipated
Wasatch Fm	2,357	5,170	2,100		SS-SH	oil and/or gas anticipated
Mesaverde	4,457	3,070	1,870		SS-SH	oil and/or gas anticipated
Castlegate SS	6,327	1,200	275		Sandstone	gas
Mancos	6,602	925	505		SS-SH	gas
Mancos B	7,107	420	3,325		Sandstone	gas
Dakota Silt	10,432	(2,905)	95		Sandstone	gas
Dakota	10,527	(3,000)	117		Sandstone	gas
Cedar Mtn Fm	10,644	(3,117)	116		Sandstone	gas
Buckhorn Congl	10,760	(3,233)	67		SS-SH	gas
Morrison Fm	10,827	(3,300)	567		SS-SH	
Curtis Fm	11,394	(3,867)	143		SS-SH	
Entrada SS	11,537	(4,010)	213		Sandstone	gas
Carmel	11,750	(4,223)	57		LS-SH	
Kayenta	11,807	(4,280)	140		Sandstone	gas
Wingate	11,947	(4,420)	250		Sandstone	gas
TD	12,197	(4,670)				

WIRELINE LOGS		CORING & CUTTINGS	
LOGGING COMPANY:		**CORING TOOL CO:**	
TRIPLE COMBO	YES	**CORE ANALYSIS CO:**	
FROM:	TD to surf		
		30' SAMPLES: Surf Csg	**TO:** TD
		10' SAMPLES:	**TO:**
		SHIP CUTTINGS TO:	Larry Rasmussen
			Whiting Petroleum Corp.
			1700 Broadway, Ste 2300
			Denver, CO 80290

WELLSITE GEOLOGIST		MUD LOGGER	
NAME:		**NAME:**	
PHONE		**PHONE**	
STARTING DEPTH:		**STARTING DEPTH:**	Surface Csg

NOTIFICATIONS		OFFICE	MOBILE	HOME
1st	Larry Rasmussen - Geologist	303-390-4093	720-272-5978	303-561-0788
2nd	John Forster - Regional Geol Manager	303-390-4117	303-324-7690	303-850-0346
3rd	Dana Greathouse - Regional Drilling Mgr	303-390-4247	303-808-3687	303-730-1204
4th	Tom Smith - Sr. Operations Engineer	303-390-4124	720-283-3272	

SPECIAL INSTRUCTIONS: Anticipate continuous gas from Wasatch through the Entrada, possibly Wingate.
Expect underpressured reservoirs, 0.35 psi/ft, Bottom Hole Temperature of ~230F

Prepared by: Larry Rasmussen 10/2/2009

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Whiting Oil & Gas Corp Ebusiness
Do Not Mail - 1700 Broadway Ste2300
Denver, Colorado 80290

Ute Tribal 5-32-14-20
Flat Rock Field
Uintah County, Utah
United States of America
S:32 T:14S R:20E
API/UWI 43-047-39741

Multiple String Cement Recommendation

Prepared for: Mr. Dana Greathouse

October 22, 2009
Version: 2

Submitted by:
Matt Collins
Halliburton
1125 17th Street #1900
Denver, Colorado 80202
303.501.9557

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Halliburton appreciates the opportunity to present this proposal and looks forward to being of service to you.

Foreword

Enclosed is our recommended procedure for cementing the casing strings in the referenced well. The information in this proposal includes well data, calculations, materials requirements, and cost estimates. This proposal is based on information from our field personnel and previous cementing services in the area.

Halliburton Energy Services recognizes the importance of meeting society's needs for health, safety, and protection of the environment. It is our intention to proactively work with employees, customers, the public, governments, and others to use natural resources in an environmentally sound manner while protecting the health, safety, and environmental processes while supplying high quality products and services to our customers.

We appreciate the opportunity to present this proposal for your consideration and we look forward to being of service to you. Our Services for your well will be coordinated through the Service Center listed below. If you require any additional information or additional designs, please feel free to contact myself or our field representative listed below.

Prepared and Submitted by:

Matt Collins
Account Representative

SERVICE CENTER:	Vernal
SERVICE COORDINATOR:	Weston Spencer / Cody Slaugh
PSL DISTRICT MANAGER:	Christopher Jerez
PDC:	Jason Bergin / Corey Reynolds
CMT ENGINEERS:	Chris Cicirello / Sean Bullington
	Ted Groff
PHONE NUMBER:	435.789.2550

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Cementing Best Practices

1. Cement quality and weight: You must choose a cement slurry that is designed to solve the problems specific to each casing string.

2. Waiting time: You must hold the cement slurry in place and under pressure until it reaches its' initial set without disturbing it. A cement slurry is a time-dependent liquid and must be allowed to undergo a hydration reaction to produce a competent cement sheath. A fresh cement slurry can be worked (thickening or pump time) as long as it is in a plastic state and before going through its' transition phase. If the cement slurry is not allowed to transition without being disturbed, it may be subjected to changes in density, dilution, settling, water separation, and gas cutting that may lead to a lack of zonal isolation and possible bridging in the annulus.

3. Pipe movement: Pipe movement may be one of the single most influential factors in mud removal. Reciprocation and/or rotation mechanically breaks up gelled mud and changes the flow patterns in the annulus to improve displacement efficiency.

4. Mud properties (for cementing):

Rheology:

Plastic Viscosity (PV) < 15 centipoise (cp)
Yield Point (YP) < 10 lb/100 ft2
These properties should be reviewed with the Mud Engineer, Drilling Engineer, and Company Representative(s) to ensure no hole problems are created.

Gel Strength:

The 10-second/10-minute gel strength values should be such that the 10-second and 10-minute readings are close together or flat (i.e., 5/6). The 30-minute reading should be less than 20 lb/100 ft². Sufficient shear stress may not be achieved on a primary cement job to remove mud left in the hole if the mud were to develop more than 25 lb/100 ft² of gel strength.

Fluid Loss:

Decreasing the filtrate loss into a permeable zone enhances the creation of a thin, competent filter cake. A thin, competent filter cake created by a low fluid loss mud system is desirable over a thick, partially gelled filter cake. A mud system created with a low fluid loss will be more easily displaced. The fluid loss value should be < 15 cc's (ideal would be 5 cc's).

5. Circulation: Prior to cementing circulate full hole volume twice, or until well conditioned mud is being returned to the surface. There should be no cutting in the mud returns. An annular velocity of 260 feet per minute is optimum (SPE/IADC 18617), if possible.

6. Flow rate: Turbulent flow is the most desirable flow regime for mud removal. If turbulence cannot be achieved pump at as high a flow rate that can practically and safely be used to create the maximum flow energy. The highest mud removal is achieved when the maximum flow energy is obtained.

7. Pipe Centralization: This Cement will take the path of least resistance, therefore proper centralization is important to help prevent the casing from contacting the borehole wall. A minimum standoff of 70% should be targeted for optimum displacement efficiency.

8. Rat hole: A weighted viscous pill placed in the rat hole prior to cementing will minimize the risk of higher density cement mixing with lower density mud when the well is static.

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9. Top and Bottom plugs: A top and bottom plug are recommended to be run on all primary casing jobs. The bottom plug should be run after the spacer and ahead of the first cement slurry.

10. Spacers and flushes: Spacers and/or flushes should be used to prevent contamination between the cement slurry and the drilling fluid. They are also used to clean the wellbore and aid with bonding. To determine the volume, either a minimum of 10 minutes contact time or 1000 ft. of annular fill, whichever is greater, is recommended.

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Job Information — *13 3/8" Casing*

Well Name: Ute Tribal — Well #: 5-32-14-20

20" Conductor	0 - 60 ft (MD)
Outer Diameter	20.000 in
Inner Diameter	19.124 in
Linear Weight	94 lbm/ft
Casing Grade	H-40
17 1/2" Open Hole	60 - 500 ft (MD)
Inner Diameter	17.500 in
Job Excess	100 %
13 3/8" Surface Casing	0 - 500 ft (MD)
Outer Diameter	13.375 in
Inner Diameter	12.715 in
Linear Weight	48 lbm/ft
Casing Grade	H-40

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Calculations — *13 3/8" Casing*

Spacer:

Total Spacer	= 112.29 ft^3
	= 20.00 bbl

Cement : (500.00 ft fill)

60.00 ft * 1.019 ft^3/ft * 0 %	= 61.14 ft^3
440.00 ft * 0.6946 ft^3/ft * 100 %	= 611.28 ft^3
Total Lead Cement	= 672.42 ft^3
	= 119.76 bbl
Sacks of Cement	= 393 sks

Shoe Joint Volume: (40.00 ft fill)

40.00 ft * 0.8818 ft^3/ft	= 35.27 ft^3
	= 6.28 bbl
Tail plus shoe joint	= 707.69 ft^3
	= 126.05 bbl

Total Pipe Capacity:

500.00 ft * 0.8818 ft^3/ft	= 440.89 ft^3
	= 78.53 bbl

Displacement Volume to Shoe Joint:

Capacity of Pipe - Shoe Joint	= 78.53 bbl - 6.28 bbl
	= 72.24 bbl

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Fluid Instructions

Fluid 1: Water Spacer

Gel Water	Fluid Density:	8.34 lbm/gal
	Fluid Volume:	20 bbl

Fluid 2: Lead Cement

Rockies LT	Fluid Weight	13.50 lbm/gal
0.25 lbm/sk Kwik Seal (Lost Circulation Additive)	Slurry Yield:	1.80 ft^3/sk
0.125 lbm/sk Poly-E-Flake (Lost Circulation Additive)	Total Mixing Fluid:	9.33 Gal/sk
	Top of Fluid:	0 ft
	Calculated Fill:	500 ft
	Volume:	126.05 bbl
	Calculated Sacks:	393.16 sks
	Proposed Sacks:	395 sks

Fluid 3: Water Spacer

Water Displacement	Fluid Density:	8.34 lbm/gal
	Fluid Volume:	72.24 bbl

Fluid 4: Top Out Cement

Premium Plus - Type III	Fluid Weight	14.50 lbm/gal
94 lbm/sk Premium Plus - Type III (Cement-non-api)	Slurry Yield:	1.41 ft^3/sk
2 % Calcium Chloride (Accelerator)	Total Mixing Fluid:	6.86 Gal/sk
	Proposed Sacks:	200 sks

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Detailed Pumping Schedule

Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Estimated Avg Rate bbl/min	Downhole Volume
1	Spacer	Gel Water	8.3		20 bbl
2	Cement	Primary Cement	13.5		395 sks
3	Spacer	Water Displacement	8.3		72.24 bbl
4	Cement	Top Out Cement	14.5		200 sks

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Job Information *9 5/8" Casing*

Well Name: Ute Tribal	Well #: 5-32-14-20
13 3/8" Surface Casing	0 - 500 ft (MD)
Outer Diameter	13.375 in
Inner Diameter	12.715 in
Linear Weight	48 lbm/ft
Casing Grade	H-40
12 1/4" Open Hole	500 - 4616 ft (MD)
Inner Diameter	12.250 in
Job Excess	35 %
9 5/8" Intermediate Casing	0 - 4616 ft (MD)
Outer Diameter	9.625 in
Inner Diameter	8.921 in
Linear Weight	36 lbm/ft
Casing Grade	J-55
BHCT	100 degF

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Spacer:

Total Spacer	= 112.29 ft^3
	= 20.00 bbl

Spacer:

2.00 ft * 0.3765 ft^3/ft * 0 %	= 0.75 ft^3
Total Spacer	= 224.58 ft^3
	= 40.00 bbl

Spacer:

298.00 ft * 0.3765 ft^3/ft * 0 %	= 112.20 ft^3
Total Spacer	= 112.29 ft^3
	= 20.00 bbl

Cement : (3816.00 ft fill)

200.00 ft * 0.3765 ft^3/ft * 0 %	= 75.30 ft^3
3616.00 ft * 0.3132 ft^3/ft * 35 %	= 1528.86 ft^3
Total Lead Cement	= 1604.16 ft^3
	= 285.71 bbl
Sacks of Cement	= 421 sks

Cement : (500.00 ft fill)

500.00 ft * 0.3132 ft^3/ft * 35 %	= 211.40 ft^3
Tail Cement	= 211.40 ft^3
	= 37.65 bbl

Shoe Joint Volume: (40.00 ft fill)

40.00 ft * 0.4341 ft^3/ft	= 17.36 ft^3
	= 3.09 bbl
Tail plus shoe joint	= 228.76 ft^3
	= 40.74 bbl
Total Tail	= 199 sks

Total Pipe Capacity:

4616.00 ft * 0.4341 ft^3/ft	= 2003.64 ft^3
	= 356.86 bbl

Displacement Volume to Shoe Joint:

Capacity of Pipe - Shoe Joint	= 356.86 bbl - 3.09 bbl
	= 353.77 bbl

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Fluid Instructions

Fluid 1: Water Spacer

Fresh Water

Fluid Density:	8.34 lbm/gal
Fluid Volume:	20 bbl

Fluid 2: Reactive Spacer

SUPER FLUSH 101

Fluid Density:	10 lbm/gal
Fluid Volume:	40 bbl

Fluid 3: Water Spacer

Fresh Water

Fluid Density:	8.34 lbm/gal
Fluid Volume:	20 bbl

Fluid 4: Lead Cement

ECONOCEM (TM) SYSTEM

0.125 lbm/sk Poly-E-Flake (Lost Circulation Additive)

Fluid Weight	11 lbm/gal
Slurry Yield:	3.81 ft^3/sk
Total Mixing Fluid:	23.01 Gal/sk
Top of Fluid:	300 ft
Calculated Fill:	3816 ft
Volume:	285.71 bbl
Calculated Sacks:	420.60 sks
Proposed Sacks:	425 sks

Fluid 5: Tail Cement

Premium Cement

94 lbm/sk Premium Cement (Cement)

0.3 % Halad(R)-344 (Low Fluid Loss Control)

0.25 % CFR-3 (Dispersant)

0.35 % HR-5 (Retarder)

0.2 % Super CBL (Gas Migration Control)

Fluid Weight	15.80 lbm/gal
Slurry Yield:	1.15 ft^3/sk
Total Mixing Fluid:	4.94 Gal/sk
Top of Fluid:	4116 ft
Calculated Fill:	500 ft
Volume:	40.74 bbl
Calculated Sacks:	198.58 sks
Proposed Sacks:	200 sks

Fluid 6: Mud

Mud Displacement

Fluid Density:	10 lbm/gal
Fluid Volume	353.77 bbl

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Detailed Pumping Schedule

Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Estimated Avg Rate bbl/min	Downhole Volume
1	Spacer	Fresh Water	8.3		20 bbl
2	Spacer	SUPER FLUSH 101	10.0		40 bbl
3	Spacer	Fresh Water	8.3		20 bbl
4	Cement	EconoCem V3	11.0		425 sks
5	Cement	Premium Cement	15.8		200 sks
6	Mud	Mud Displacement	10.0		353.77 bbl

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Job Information — 7" Casing

Well Name: Ute Tribal	Well #: 5-32-14-20
9 5/8" Intermediate Casing	0 - 4616 ft (MD)
Outer Diameter	9.625 in
Inner Diameter	8.921 in
Linear Weight	36 lbm/ft
Casing Grade	J-55
8 3/4" Open Hole	4616 - 11628 ft (MD)
Inner Diameter	8.750 in
Job Excess	25 %
7" Production Casing	0 - 11628 ft (MD)
Outer Diameter	7.000 in
Inner Diameter	6.184 in
Linear Weight	29 lbm/ft
Mud Weight	9 lbm/gal
BHCT	180 degF

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Calculations *7" Casing*

Spacer:

337.00 ft * 0.1668 ft^3/ft * 0 %	= 56.22 ft^3
Total Spacer	= 56.15 ft^3
	= 10.00 bbl

Spacer:

673.00 ft * 0.1668 ft^3/ft * 0 %	= 112.26 ft^3
Total Spacer	= 112.29 ft^3
	= 20.00 bbl

Spacer:

337.00 ft * 0.1668 ft^3/ft * 0 %	= 56.22 ft^3
Total Spacer	= 56.15 ft^3
	= 10.00 bbl

Cement : (6057.00 ft fill)

200.00 ft * 0.1668 ft^3/ft * 0 %	= 33.36 ft^3
5857.00 ft * 0.1503 ft^3/ft * 25 %	= 1100.60 ft^3
Total Foamed Lead Cement	= 1133.97 ft^3
	= 201.97 bbl
Sacks of Cement	= 466 sks

Cement : (1155.00 ft fill)

1155.00 ft * 0.1503 ft^3/ft * 25 %	= 217.04 ft^3
Tail Cement	= 217.04 ft^3
	= 38.66 bbl

Shoe Joint Volume: (40.00 ft fill)

40.00 ft * 0.2086 ft^3/ft	= 8.34 ft^3
	= 1.49 bbl
Tail plus shoe joint	= 225.38 ft^3
	= 40.14 bbl
Total Tail	= 133 sks

Total Pipe Capacity:

11628.00 ft * 0.2086 ft^3/ft	= 2425.33 ft^3
	= 431.97 bbl

Displacement Volume to Shoe Joint:

Capacity of Pipe - Shoe Joint	= 431.97 bbl - 1.49 bbl
	= 430.48 bbl

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Fluid Instructions

Fluid 1: Water Spacer
Fresh Water

Fluid Density:	8.34 lbm/gal
Fluid Volume:	10 bbl

Fluid 2: Reactive Spacer
SUPER FLUSH

Fluid Density:	10 lbm/gal
Fluid Volume:	20 bbl

Fluid 3: Water Spacer
Fresh Water

Fluid Density:	8.34 lbm/gal
Fluid Volume:	10 bbl

Fluid 4: Foamed Lead Cement
ELASTISEAL (TM) SYSTEM
1.5 % FDP-C760-04 (Foamer)

Fluid Weight	13.50 lbm/gal
Slurry Yield:	1.70 ft^3/sk
Total Mixing Fluid:	8.11 Gal/sk
Top of Fluid:	4416 ft
Calculated Fill:	6057 ft
Volume:	201.97 bbl
Calculated Sacks:	466.09 sks
Proposed Sacks:	470 sks

Fluid 5: Tail Cement
ELASTICEM (TM) SYSTEM

Fluid Weight	13.50 lbm/gal
Slurry Yield:	1.70 ft^3/sk
Total Mixing Fluid:	8.09 Gal/sk
Top of Fluid:	10473 ft
Calculated Fill:	1155 ft
Volume:	40.14 bbl
Calculated Sacks:	132.73 sks
Proposed Sacks:	135 sks

Fluid 6: Water Spacer
Displacement

Fluid Density:	8.34 lbm/gal
Fluid Volume:	430.48 bbl

Fluid 7: Top Out Cement
Premium Cement
94 lbm/sk Premium Cement (Cement)
12 % Cal-Seal 60 (Accelerator)
3 % Calcium Chloride (Accelerator)

Fluid Weight	14.60 lbm/gal
Slurry Yield:	1.55 ft^3/sk
Total Mixing Fluid:	7.35 Gal/sk
Proposed Sacks:	200 sks

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Detailed Pumping Schedule

Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Estimated Avg Rate bbl/min	Downhole Volume
1	Spacer	Fresh Water	8.3		10 bbl
2	Spacer	SUPER FLUSH	10.0		20 bbl
3	Spacer	Fresh Water	8.3		10 bbl
4	Cement	ELASTISEAL SYSTEM	13.5		470 sks
5	Cement	ELASTISEAL SYSTEM	13.5		135 sks
6	Spacer	Displacement	8.3		430.48 bbl
7	Cement	Cap Cement	14.6		200 sks

Foam Output Parameter Summary:

Fluid #	Fluid Name	Unfoamed Liquid Volume	Beginning Density lbm/gal	Ending Density lbm/gal	Beginning Rate scf/bbl	Ending Rate scf/bbl
Stage 1						
4	ELASTISEAL SYSTEM	140.87bbl	10.0	10.0	279.1	666.3

Foam Design Specifications:

Foam Calculation Method: Constant Density
Backpressure: 75 psig
Bottom Hole Circulating Temp: 180 degF
Mud Outlet Temperature: 120 degF

Calculated Gas = 67212.7 scf
Additional Gas = 40000 scf
Total Gas = 107212.7 scf

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Conditions

NOTE

The cost in this analysis is good for the materials and/or services outlined within and shall be valid for 30 days from the date of this proposal. In order to meet your needs under this proposal with a high quality of service and responsive timing, Halliburton will be allocating limited resources and committing valuable equipment and materials to your area of operations. Accordingly, the discounts reflected in this proposal are available only for materials and services awarded on a first-call basis. Alternate pricing may apply in the event that Halliburton is awarded work on any basis other than as a first-call provider.

The unit prices stated in the proposal are based on our current published prices. The projected equipment, personnel, and material needs are only estimates based on information about the work presently available to us. At the time the work is actually performed, conditions then existing may require an increase or decrease in the equipment, personnel, and/or material needs. Charges will be based upon unit prices in effect at the time the work is performed and the amount of equipment, personnel, and/or material actually utilized in the work. Taxes, if any, are not included. Applicable taxes, if any, will be added to the actual invoice.

It is understood and agreed between the parties that with the exception of the subject discounts, all services performed and equipment and materials sold are provided subject to Halliburton's General Terms and Conditions contained in our current price list, (which include LIMITATION OF LIABILITY and WARRANTY provisions), and pursuant to the applicable Halliburton Work Order Contract (whether or not executed by you), unless a Master Service and/or Sales Contract applicable to the services, equipment, or materials supplied exists between your company and Halliburton, in which case the negotiated Master Contract shall govern the relationship between the parties. A copy of the latest version of our General Terms and Conditions is available from your Halliburton representative or at: http://www.halliburton.com/hes/general_terms_conditions.pdf for your convenient review, and we would appreciate receiving any questions you may have about them. Should your company be interested in negotiating a Master Contract with Halliburton, our Law Department would be pleased to work with you to finalize a mutually agreeable contract. In this connection, it is also understood and agreed that Customer will continue to execute Halliburton usual field work orders and/or tickets customarily required by Halliburton in connection with the furnishing of said services, equipment, and materials.
Any terms and conditions contained in purchase orders or other documents issued by the customer shall be of no effect except to confirm the type and quantity of services, equipment, and materials to be supplied to the customer.
If customer does not have an approved open account with Halliburton or a mutually executed written contract with Halliburton, which dictates payment terms different than those set forth in this clause, all sums due are payable in cash at the time of performance of services or delivery of equipment, products, or materials. If customer has an approved open account, invoices are payable on the twentieth day after date of invoice.

Customer agrees to pay interest on any unpaid balance from the date payable until paid at the highest lawful contract rate applicable, but never to exceed 18% per annum. In the event Halliburton employs an attorney for collection of any account, customer agrees to pay attorney fees of 20% of the unpaid account, plus all collection and court costs.

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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: ML-44317
6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute Indian Tribe
7. UNIT or CA AGREEMENT NAME:
8. WELL NAME and NUMBER: Ute Tribal 5-32-14-20
9. API NUMBER: 4304739741

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ DRY ☐ OTHER

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

2. NAME OF OPERATOR: Whiting Oil and Gas Corporation

3. ADDRESS OF OPERATOR: 1700 Broadway, #2300 CITY Denver STATE CO ZIP 80290
PHONE NUMBER: (303) 837-1661
10 FIELD AND POOL, OR WILDCAT: Flat Rock

4. LOCATION OF WELL (FOOTAGES)
AT SURFACE: 809 FNL 1529 FWL NENW
AT TOP PRODUCING INTERVAL REPORTED BELOW: 1981 FNL 645 FWL SWNW
2004 FNL 0619 FWL
AT TOTAL DEPTH: 2003 FNL 600 FWL SWNW

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NENW 32 14S 20E
12. COUNTY: Uintah
13. STATE: UTAH

14. DATE SPUDDED: 10/8/2009
15. DATE T.D. REACHED: 11/29/2009
16. DATE COMPLETED: 2/17/2010 ABANDONED ☐ READY TO PRODUCE ☑
17. ELEVATIONS (DF, RKB, RT, GL): 7498 GR, 7527 KB

18. TOTAL DEPTH: MD 12,370 TVD 12,230
19. PLUG BACK T.D.: MD 11,600 TVD 11,460
20. IF MULTIPLE COMPLETIONS, HOW MANY? * N/A
21. DEPTH BRIDGE PLUG SET: MD 11,621 TVD 11,481

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)
CB/GR/CCL, HVC-Run 1&2, Comp Trip Combo Qklk-Run 1&2, DLR -Run 1&2, CPD/CDN-Run 1&2

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
17 1/2"	13 3/8 J55	54.5	0	478			129	0	
12 3/4"	9 5/8 J55	40	0	4,616		Lite 625	425	0	
						PL 240	61	0	
8 3/4"	7 L80	29	0	11,622		PP 530	165	3900	
						PP 145	44	10300	
6"	4 1/2" HCP 110	11.6	11,337	12,370		50/50 60	21	11357	

25. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 3/8"	10,538							

26. PRODUCING INTERVALS / 27. PERFORATION RECORD

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)	INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
(A) Dakota Silt	10,564	10,574	10,425	10,435	10,564 10,574		12	Open ☑ Squeezed ☐
(B) Entrada	11,691	11,719	11,551	11,579	11,691 11,695		12	Open ☐ Squeezed ☐
(C)					11,701 11,707		18	Open ☐ Squeezed ☐
(D)					11,709 11,719		30	Open ☐ Squeezed ☐

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

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
10564'-10574'	7880# 100 Mesh, 150240# 20/40 PRC, 30Q pHasfrac, 92 tns CO2, 1490 bbls
11691'-11719'	10K# Jordan Sand, 1236 bbls
11691'-11719'	80160# 30-50 Temp LC, 30Q CO2, Foam Frac, 1402 bbls

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

30. WELL STATUS: Shut In

RECEIVED
JUN 07 2010
DIV. OF OIL, GAS & MINING

(5/2000) (CONTINUED ON BACK)

31. INITIAL PRODUCTION

INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
										Swab
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:**
										SI

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:
2/22/2010		2/23/2010		24			0	460	12	Flowing
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:**
16/64	1,550	1,850		1,061			0	460	12	TA

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.)

Sold

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.

34. FORMATION (Log) MARKERS:

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
				Castlegate	6,405
				Dakota Silt	10,564
				Dakota	10,658
				Cedar Mountain	10,784
				Buckhorn	10,898
				Morrison	10,954
				Curtis	11,587
				Entrada	11,680
				Kayenta	11,966
				Wingate	12,065

35. ADDITIONAL REMARKS (Include plugging procedure)

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

NAME (PLEASE PRINT) Pauleen Tobin TITLE Engineer Tech

SIGNATURE [signature] DATE 6/1/10

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)

Whiting Oil and Gas Corporation
Form 8
Ute Tribal 5-32-14-20

26 & 27. Perforation Record continued for:

Formation	MD	Formation TVD	Perforation Interval	Con't	No. of holes	Perf Status
Kayenta	12035'-12043'	11895'-11903'	12035'-43'		24	Plugged off
Wingate	12120'-12140'	11980'-12000'	12120'-28'		24	Plugged off
			12124'-25'	(DFIT)	4	Plugged off
			12132'-40'		24	Plugged off

28. Acid, Fracture, Treatment, Cement Squeeze, etc.

Depth Interval	Amount and Type of Material
12035'-12043'	10% HCl breakdown 24 bbls
12124'-12125'	10% HCl breakdown 44.5 bbls

Whiting Petroleum Corporation

Uintah County, UT
Section 32-T14S-R20E
UTE Tribal 5-32-14-20
Well

Survey: Final Survey Report

Standard Survey Report

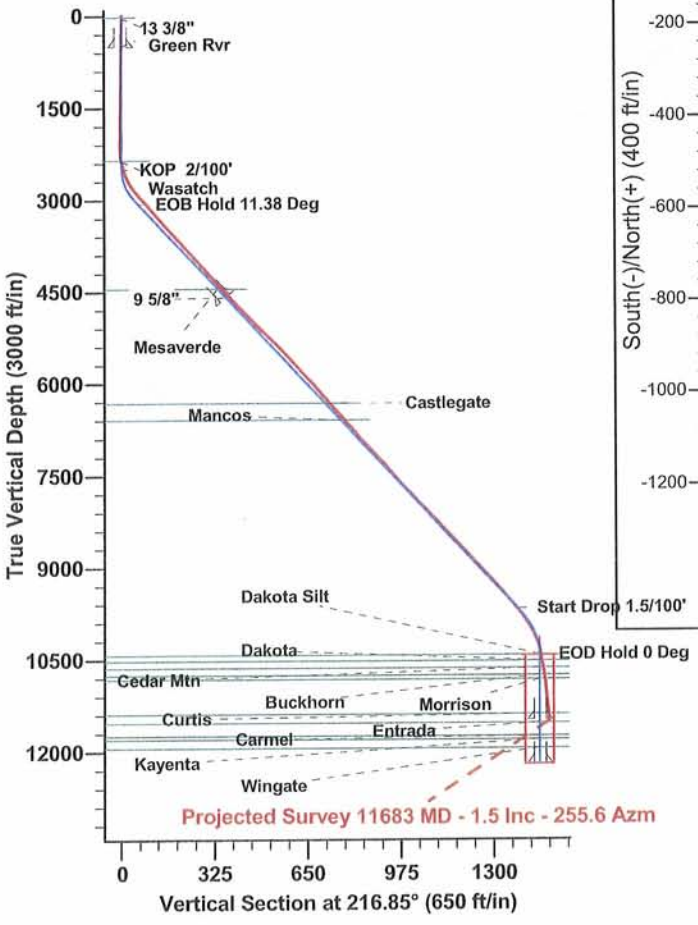
24 November, 2009

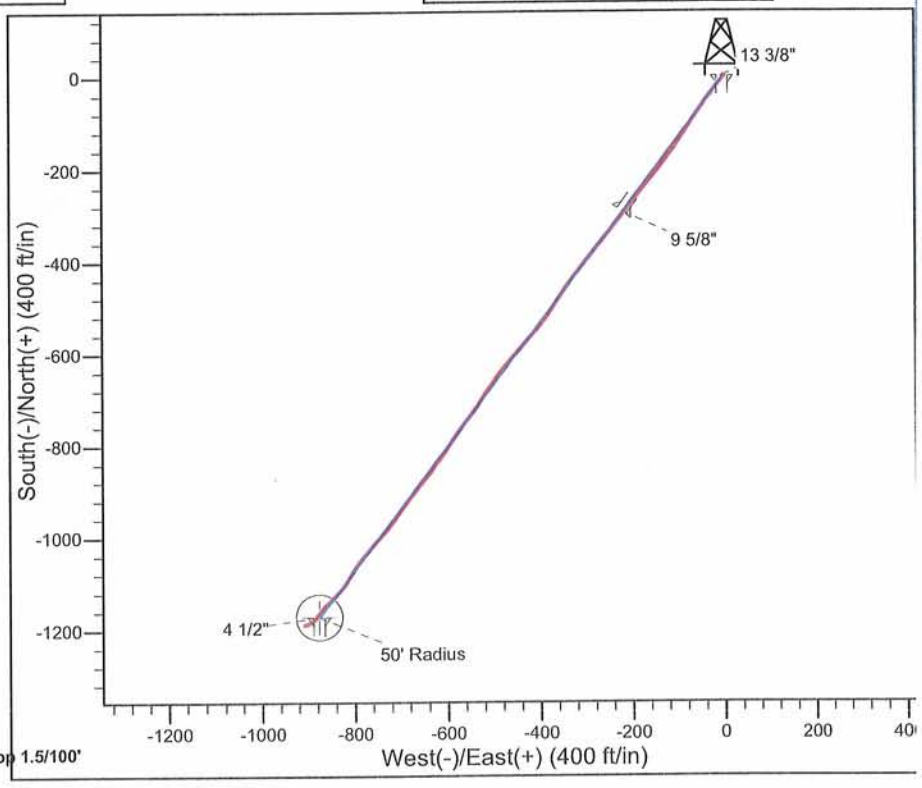
Whiting Petroleum Corporation
UTE Tribal 5-32-14-20
Uintah County, UT
Final Survey Report

PROJECT DETAILS: Uintah County, UT	
Geodetic System:	US State Plane 1983
Datum:	North American Datum 1983
Ellipsoid:	GRS 1980
Zone:	Utah Central Zone
System Datum:	Mean Sea Level

T M Azimuths to True North
Magnetic North: 11.29°

Magnetic Field
Strength: 52238.2snT
Dip Angle: 65.52°
Date: 2009/10/04
Model: IGRF200510





SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0
2	2500.0	0.00	0.00	2500.0	0.0	0.0	0.00	0.00	0.0
3	3069.1	11.38	216.85	3065.4	-45.1	-33.8	2.00	216.85	56.3
4	9814.6	11.38	216.85	9678.2	-1110.4	-832.1	0.00	0.00	1387.6
5	10573.4	0.00	0.00	10432.0	-1170.5	-877.1	1.50	180.00	1462.7
6	12338.4	0.00	0.00	12197.0	-1170.5	-877.1	0.00	0.00	1462.7

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
28.0	28.0	Green Rvr
2357.0	2357.0	Wasatch
4457.0	4488.7	Mesaverde
6327.0	6396.2	Castlegate
6602.0	6676.7	Mancos
10432.0	10573.4	Dakota Silt
10527.0	10668.4	Dakota
10644.0	10785.4	Cedar Mtn
10760.0	10901.4	Buckhorn
10827.0	10968.4	Morrison
11394.0	11535.4	Curtis
11537.0	11678.4	Entrada
11750.0	11891.4	Carmel
11807.0	11948.4	Kayenta
11947.0	12088.4	Wingate

Survey Report

Company:	Whiting Petroleum Corporation	**Local Co-ordinate Reference:**	Well UTE Tribal 5-32-14-20
Project:	Uintah County, UT	**TVD Reference:**	WELL @ 7527.0ft (Bronco Rig)
Site:	Section 32-T14S-R20E	**MD Reference:**	WELL @ 7527.0ft (Bronco Rig)
Well:	UTE Tribal 5-32-14-20	**North Reference:**	True
Wellbore:	Well	**Survey Calculation Method:**	Minimum Curvature
Design:	Well	**Database:**	EDM 2003.16 Single User Db

Project Uintah County, UT

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Utah Central Zone		

Site Section 32-T14S-R20E

Site Position:		**Northing:**	7,013,846.02 ft	**Latitude:**	39° 33' 39.240 N
From:	Lat/Long	**Easting:**	2,145,484.00 ft	**Longitude:**	109° 42' 30.161 W
Position Uncertainty:	0.0 ft	**Slot Radius:**	"	**Grid Convergence:**	1.15 °

Well UTE Tribal 5-32-14-20

Well Position	**+N/-S**	0.0 ft	**Northing:**	7,013,837.29 ft	**Latitude:**	39° 33' 39.020 N
	+E/-W	0.0 ft	**Easting:**	2,146,160.24 ft	**Longitude:**	109° 42' 21.530 W
Position Uncertainty		0.0 ft	**Wellhead Elevation:**	7,527.0 ft	**Ground Level:**	7,499.0 ft

Wellbore Well

Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF200510	2009/10/04	11.29	65.52	52,238

Design Well

Audit Notes:

Version:	1.0	**Phase:**	ACTUAL	**Tie On Depth:**	0.0

Vertical Section:	**Depth From (TVD) (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Direction (°)**
	0.0	0.0	0.0	214.97

Survey Program **Date** 2009/11/24

From (ft)	**To (ft)**	**Survey (Wellbore)**	**Tool Name**	**Description**
2,094.0	11,638.0	Final Survey Report (Well)	MWD	

Survey

Measured Depth (ft)	**Inclination (°)**	**Azimuth (°)**	**Vertical Depth (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Vertical Section (ft)**	**Dogleg Rate (°/100ft)**	**Build Rate (°/100ft)**	**Turn Rate (°/100ft)**
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
2,094.0	0.30	55.40	2,094.0	3.1	4.5	-5.1	0.01	0.01	0.00
2,124.0	0.40	173.70	2,124.0	3.1	4.6	-5.1	2.01	0.33	394.33
2,158.0	0.50	147.70	2,158.0	2.8	4.7	-5.0	0.66	0.29	-76.47
2,189.0	0.00	193.60	2,189.0	2.7	4.8	-4.9	1.61	-1.61	0.00
2,221.0	0.70	219.40	2,221.0	2.5	4.6	-4.7	2.19	2.19	0.00
2,251.0	0.90	225.60	2,251.0	2.2	4.3	-4.3	0.73	0.67	20.67
2,282.0	0.90	205.20	2,282.0	1.8	4.1	-3.8	1.03	0.00	-65.81
2,314.0	1.20	214.70	2,314.0	1.3	3.8	-3.3	1.08	0.94	29.69
2,346.0	1.80	207.50	2,346.0	0.6	3.3	-2.4	1.96	1.87	-22.50
2,377.0	2.40	218.00	2,376.9	-0.3	2.7	-1.3	2.29	1.94	33.87
2,409.0	2.60	216.00	2,408.9	-1.4	1.9	0.1	0.68	0.62	-6.25
2,438.0	2.80	216.10	2,437.9	-2.5	1.1	1.5	0.69	0.69	0.34

Survey Report

Company:	Whiting Petroleum Corporation	**Local Co-ordinate Reference:**	Well UTE Tribal 5-32-14-20
Project:	Uintah County, UT	**TVD Reference:**	WELL @ 7527.0ft (Bronco Rig)
Site:	Section 32-T14S-R20E	**MD Reference:**	WELL @ 7527.0ft (Bronco Rig)
Well:	UTE Tribal 5-32-14-20	**North Reference:**	True
Wellbore:	Well	**Survey Calculation Method:**	Minimum Curvature
Design:	Well	**Database:**	EDM 2003.16 Single User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
2,473.0	3.30	219.80	2,472.8	-4.0	-0.1	3.3	1.53	1.43	10.57
2,506.0	3.60	222.60	2,505.8	-5.5	-1.4	5.3	1.04	0.91	8.48
2,536.0	4.40	224.00	2,535.7	-7.0	-2.8	7.4	2.69	2.67	4.67
2,567.0	4.70	224.00	2,566.6	-8.8	-4.5	9.8	0.97	0.97	0.00
2,599.0	4.80	222.20	2,598.5	-10.7	-6.3	12.4	0.56	0.31	-5.62
2,631.0	5.50	223.60	2,630.4	-12.8	-8.3	15.3	2.22	2.19	4.37
2,663.0	5.80	216.80	2,662.2	-15.2	-10.3	18.4	2.29	0.94	-21.25
2,696.0	6.50	220.80	2,695.0	-18.0	-12.5	21.9	2.49	2.12	12.12
2,728.0	7.00	219.10	2,726.8	-20.9	-14.9	25.7	1.68	1.56	-5.31
2,760.0	7.30	218.70	2,758.5	-24.0	-17.5	29.6	0.95	0.94	-1.25
2,792.0	8.10	216.30	2,790.3	-27.4	-20.1	33.9	2.69	2.50	-7.50
2,823.0	8.40	217.30	2,820.9	-30.9	-22.7	38.4	1.07	0.97	3.23
2,855.0	9.30	217.50	2,852.6	-34.8	-25.7	43.3	2.81	2.81	0.62
2,887.0	9.70	215.20	2,884.1	-39.1	-28.8	48.6	1.72	1.25	-7.19
2,919.0	10.10	218.40	2,915.6	-43.5	-32.1	54.1	2.13	1.25	10.00
2,950.0	10.60	217.50	2,946.1	-47.9	-35.6	59.6	1.70	1.61	-2.90
2,982.0	10.60	215.50	2,977.6	-52.6	-39.1	65.5	1.15	0.00	-6.25
3,012.0	10.60	214.30	3,007.1	-57.1	-42.2	71.0	0.74	0.00	-4.00
3,044.0	10.70	215.50	3,038.5	-62.0	-45.6	76.9	0.76	0.31	3.75
3,075.0	10.60	214.10	3,069.0	-66.7	-48.9	82.7	0.89	-0.32	-4.52
3,107.0	10.40	215.40	3,100.5	-71.5	-52.2	88.5	0.97	-0.62	4.06
3,139.0	10.60	217.00	3,131.9	-76.2	-55.6	94.3	1.10	0.62	5.00
3,169.0	10.80	214.50	3,161.4	-80.7	-58.9	99.9	1.68	0.67	-8.33
3,202.0	10.60	213.30	3,193.8	-85.8	-62.3	106.0	0.91	-0.61	-3.64
3,234.0	10.60	213.80	3,225.3	-90.7	-65.6	111.9	0.29	0.00	1.56
3,266.0	10.60	215.20	3,256.7	-95.6	-68.9	117.8	0.80	0.00	4.37
3,298.0	10.80	214.70	3,288.2	-100.4	-72.3	123.7	0.69	0.62	-1.56
3,329.0	10.80	213.60	3,318.6	-105.2	-75.6	129.5	0.66	0.00	-3.55
3,361.0	10.90	213.40	3,350.1	-110.3	-78.9	135.6	0.33	0.31	-0.62
3,490.0	10.60	212.00	3,476.8	-130.5	-91.9	159.6	0.31	-0.23	-1.09
3,522.0	10.60	212.90	3,508.2	-135.5	-95.0	165.5	0.52	0.00	2.81
3,554.0	10.80	212.40	3,539.7	-140.5	-98.3	171.4	0.69	0.62	-1.56
3,584.0	10.90	212.70	3,569.2	-145.2	-101.3	177.1	0.38	0.33	1.00
3,615.0	11.00	214.00	3,599.6	-150.1	-104.5	182.9	0.86	0.32	4.19
3,647.0	11.10	215.00	3,631.0	-155.2	-108.0	189.1	0.68	0.31	3.12
3,679.0	11.00	214.70	3,662.4	-160.2	-111.5	195.2	0.36	-0.31	-0.94
3,710.0	11.20	215.00	3,692.8	-165.1	-114.9	201.2	0.67	0.65	0.97
3,742.0	11.00	217.70	3,724.2	-170.1	-118.6	207.3	1.74	-0.62	8.44
3,771.0	11.10	218.20	3,752.7	-174.5	-122.0	212.9	0.48	0.34	1.72
3,806.0	10.90	218.40	3,787.0	-179.7	-126.1	219.6	0.58	-0.57	0.57
3,869.0	10.70	217.70	3,848.9	-189.0	-133.4	231.3	0.38	-0.32	-1.11
3,901.0	10.60	217.10	3,880.4	-193.7	-137.0	237.3	0.47	-0.31	-1.87
3,933.0	10.60	218.00	3,911.8	-198.4	-140.6	243.1	0.52	0.00	2.81
3,964.0	10.70	218.50	3,942.3	-202.9	-144.1	248.9	0.44	0.32	1.61
3,998.0	10.80	219.40	3,975.7	-207.8	-148.1	255.2	0.57	0.29	2.65
4,062.0	10.80	218.50	4,038.6	-217.1	-155.7	267.1	0.26	0.00	-1.41
4,125.0	11.10	219.90	4,100.4	-226.4	-163.2	279.1	0.64	0.48	2.22
4,189.0	11.10	219.10	4,163.2	-235.9	-171.1	291.4	0.24	0.00	-1.25
4,252.0	11.00	218.90	4,225.1	-245.3	-178.7	303.4	0.17	-0.16	-0.32
4,316.0	11.20	217.50	4,287.9	-255.0	-186.3	315.7	0.52	0.31	-2.19
4,380.0	11.20	216.10	4,350.6	-264.9	-193.7	328.1	0.42	0.00	-2.19
4,442.0	11.00	218.20	4,411.5	-274.4	-200.9	340.1	0.73	-0.32	3.39
4,505.0	11.00	219.10	4,473.3	-283.8	-208.4	352.1	0.27	0.00	1.43
4,563.0	10.80	218.20	4,530.3	-292.4	-215.3	363.0	0.45	-0.34	-1.55

Survey Report

Company:	Whiting Petroleum Corporation	**Local Co-ordinate Reference:**	Well UTE Tribal 5-32-14-20
Project:	Uintah County, UT	**TVD Reference:**	WELL @ 7527.0ft (Bronco Rig)
Site:	Section 32-T14S-R20E	**MD Reference:**	WELL @ 7527.0ft (Bronco Rig)
Well:	UTE Tribal 5-32-14-20	**North Reference:**	True
Wellbore:	Well	**Survey Calculation Method:**	Minimum Curvature
Design:	Well	**Database:**	EDM 2003.16 Single User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,622.0	11.20	217.70	4,588.2	-301.3	-222.2	374.2	0.70	0.68	-0.85
4,653.0	11.00	218.20	4,618.6	-306.0	-225.9	380.2	0.72	-0.65	1.61
4,687.0	11.30	217.00	4,652.0	-311.2	-229.9	386.8	1.12	0.88	-3.53
4,719.0	11.30	217.70	4,683.3	-316.2	-233.7	393.0	0.43	0.00	2.19
4,782.0	11.90	219.60	4,745.1	-326.1	-241.6	405.7	1.13	0.95	3.02
4,846.0	12.00	218.00	4,807.7	-336.4	-249.9	418.9	0.54	0.16	-2.50
4,909.0	12.00	219.20	4,869.3	-346.6	-258.1	432.0	0.40	0.00	1.90
4,971.0	12.00	218.70	4,929.9	-356.7	-266.2	444.8	0.17	0.00	-0.81
5,035.0	12.00	219.90	4,992.5	-367.0	-274.6	458.1	0.39	0.00	1.87
5,098.0	11.80	217.80	5,054.2	-377.1	-282.8	471.0	0.76	-0.32	-3.33
5,160.0	11.90	217.30	5,114.9	-387.2	-290.5	483.8	0.23	0.16	-0.81
5,223.0	12.20	217.70	5,176.5	-397.6	-298.5	496.9	0.49	0.48	0.63
5,287.0	12.20	218.40	5,239.0	-408.2	-306.9	510.4	0.23	0.00	1.09
5,350.0	12.40	219.60	5,300.6	-418.7	-315.3	523.8	0.52	0.32	1.90
5,414.0	12.10	216.60	5,363.1	-429.4	-323.7	537.4	1.10	-0.47	-4.69
5,479.0	12.00	217.00	5,426.7	-440.2	-331.8	550.9	0.20	-0.15	0.62
5,543.0	12.10	214.70	5,489.3	-451.0	-339.6	564.3	0.77	0.16	-3.59
5,607.0	12.00	213.60	5,551.9	-462.1	-347.1	577.6	0.39	-0.16	-1.72
5,670.0	11.60	214.00	5,613.5	-472.8	-354.3	590.5	0.65	-0.63	0.63
5,734.0	11.60	212.70	5,676.2	-483.6	-361.4	603.4	0.41	0.00	-2.03
5,797.0	11.30	211.30	5,738.0	-494.2	-368.0	615.9	0.65	-0.48	-2.22
5,861.0	11.10	212.90	5,800.8	-504.7	-374.6	628.3	0.58	-0.31	2.50
5,924.0	10.30	213.40	5,862.7	-514.5	-381.0	640.0	1.28	-1.27	0.79
5,954.0	10.10	216.80	5,892.2	-518.8	-384.1	645.3	2.11	-0.67	11.33
5,986.0	10.40	217.70	5,923.7	-523.4	-387.5	651.0	1.06	0.94	2.81
6,017.0	10.80	219.10	5,954.2	-527.8	-391.0	656.7	1.53	1.29	4.52
6,049.0	10.70	217.70	5,985.6	-532.5	-394.8	662.6	0.87	-0.31	-4.37
6,112.0	10.70	218.70	6,047.5	-541.7	-402.0	674.3	0.29	0.00	1.59
6,144.0	10.40	217.50	6,079.0	-546.3	-405.6	680.1	1.16	-0.94	-3.75
6,176.0	9.80	220.60	6,110.5	-550.7	-409.1	685.7	2.53	-1.87	9.69
6,241.0	10.40	221.70	6,174.5	-559.3	-416.6	697.1	0.97	0.92	1.69
6,305.0	11.10	221.00	6,237.3	-568.2	-424.5	708.9	1.11	1.09	-1.09
6,369.0	11.20	220.50	6,300.1	-577.6	-432.6	721.2	0.22	0.16	-0.78
6,432.0	10.90	219.80	6,362.0	-586.8	-440.4	733.3	0.52	-0.48	-1.11
6,496.0	11.10	220.10	6,424.8	-596.2	-448.2	745.4	0.33	0.31	0.47
6,559.0	11.40	221.00	6,486.6	-605.5	-456.2	757.7	0.55	0.48	1.43
6,623.0	10.70	220.60	6,549.4	-614.8	-464.2	769.9	1.10	-1.09	-0.62
6,686.0	10.60	219.90	6,611.3	-623.7	-471.8	781.5	0.26	-0.16	-1.11
6,750.0	10.40	218.00	6,674.2	-632.8	-479.1	793.1	0.62	-0.31	-2.97
6,816.0	10.90	217.70	6,739.1	-642.4	-486.6	805.3	0.76	0.76	-0.45
6,876.0	11.10	217.70	6,798.0	-651.4	-493.6	816.7	0.33	0.33	0.00
6,940.0	10.90	215.90	6,860.8	-661.2	-500.9	828.9	0.62	-0.31	-2.81
7,003.0	11.00	212.40	6,922.7	-671.1	-507.6	840.9	1.07	0.16	-5.56
7,035.0	11.30	211.90	6,954.1	-676.4	-510.9	847.1	0.98	0.94	-1.56
7,067.0	11.20	212.20	6,985.4	-681.7	-514.2	853.3	0.36	-0.31	0.94
7,098.0	11.40	212.00	7,015.8	-686.8	-517.4	859.4	0.66	0.65	-0.65
7,130.0	11.10	212.40	7,047.2	-692.1	-520.8	865.6	0.97	-0.94	1.25
7,193.0	11.20	213.30	7,109.0	-702.3	-527.4	877.8	0.32	0.16	1.43
7,253.0	11.40	214.80	7,167.9	-712.1	-534.0	889.5	0.59	0.33	2.50
7,320.0	11.40	214.80	7,233.6	-722.9	-541.5	902.8	0.00	0.00	0.00
7,384.0	11.20	216.40	7,296.3	-733.1	-548.8	915.3	0.58	-0.31	2.50
7,442.0	10.20	218.00	7,353.3	-741.7	-555.3	926.1	1.80	-1.72	2.76
7,480.0	9.60	218.20	7,390.7	-746.8	-559.3	932.6	1.58	-1.58	0.53
7,513.0	9.80	218.20	7,423.3	-751.2	-562.8	938.1	0.61	0.61	0.00

Survey Report

Company:	Whiting Petroleum Corporation	**Local Co-ordinate Reference:**	Well UTE Tribal 5-32-14-20
Project:	Uintah County, UT	**TVD Reference:**	WELL @ 7527.0ft (Bronco Rig)
Site:	Section 32-T14S-R20E	**MD Reference:**	WELL @ 7527.0ft (Bronco Rig)
Well:	UTE Tribal 5-32-14-20	**North Reference:**	True
Wellbore:	Well	**Survey Calculation Method:**	Minimum Curvature
Design:	Well	**Database:**	EDM 2003.16 Single User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
7,545.0	9.80	216.80	7,454.8	-755.5	-566.1	943.6	0.74	0.00	-4.37
7,609.0	11.20	215.00	7,517.7	-765.0	-572.9	955.2	2.25	2.19	-2.81
7,672.0	11.60	214.50	7,579.5	-775.2	-580.0	967.7	0.65	0.63	-0.79
7,736.0	11.30	214.00	7,642.2	-785.7	-587.2	980.4	0.49	-0.47	-0.78
7,799.0	11.30	214.00	7,704.0	-796.0	-594.1	992.7	0.00	0.00	0.00
7,863.0	11.50	214.00	7,766.7	-806.4	-601.2	1,005.4	0.31	0.31	0.00
7,926.0	11.80	214.30	7,828.4	-817.0	-608.3	1,018.1	0.49	0.48	0.48
7,991.0	11.90	213.80	7,892.0	-828.0	-615.8	1,031.5	0.22	0.15	-0.77
8,053.0	11.50	215.00	7,952.8	-838.4	-622.9	1,044.0	0.76	-0.65	1.94
8,117.0	11.30	215.70	8,015.5	-848.7	-630.2	1,056.7	0.38	-0.31	1.09
8,180.0	12.20	217.50	8,077.2	-859.0	-637.8	1,069.5	1.54	1.43	2.86
8,244.0	12.60	218.90	8,139.7	-869.8	-646.3	1,083.2	0.78	0.62	2.19
8,308.0	12.40	218.70	8,202.2	-880.6	-655.0	1,097.0	0.32	-0.31	-0.31
8,367.0	11.10	217.30	8,259.9	-890.1	-662.4	1,109.0	2.26	-2.20	-2.37
8,435.0	11.90	215.00	8,326.6	-901.0	-670.4	1,122.6	1.36	1.18	-3.38
8,498.0	12.10	216.60	8,388.2	-911.6	-678.1	1,135.7	0.62	0.32	2.54
8,530.0	12.00	218.20	8,419.5	-917.0	-682.1	1,142.4	1.09	-0.31	5.00
8,594.0	11.10	217.50	8,482.2	-927.1	-690.0	1,155.2	1.42	-1.41	-1.09
8,657.0	11.40	217.30	8,544.0	-936.8	-697.5	1,167.4	0.48	0.48	-0.32
8,721.0	11.30	216.10	8,606.7	-946.9	-705.0	1,180.0	0.40	-0.16	-1.87
8,784.0	11.20	214.10	8,668.5	-957.0	-712.1	1,192.3	0.64	-0.16	-3.17
8,816.0	10.80	214.10	8,699.9	-962.0	-715.5	1,198.4	1.25	-1.25	0.00
8,879.0	11.40	217.30	8,761.7	-971.9	-722.6	1,210.5	1.36	0.95	5.08
8,943.0	11.60	221.20	8,824.5	-981.8	-730.6	1,223.3	1.25	0.31	6.09
9,006.0	11.60	221.50	8,886.2	-991.3	-739.0	1,235.9	0.10	0.00	0.48
9,070.0	11.30	220.80	8,948.9	-1,000.8	-747.4	1,248.5	0.52	-0.47	-1.09
9,134.0	11.00	220.10	9,011.7	-1,010.2	-755.4	1,260.8	0.51	-0.47	-1.09
9,197.0	11.10	219.10	9,073.5	-1,019.6	-763.1	1,272.8	0.34	0.16	-1.59
9,260.0	11.30	220.60	9,135.3	-1,028.9	-770.9	1,285.0	0.56	0.32	2.38
9,321.0	10.80	219.80	9,195.2	-1,037.9	-778.5	1,296.7	0.86	-0.82	-1.31
9,386.0	10.60	217.80	9,259.1	-1,047.3	-786.0	1,308.7	0.65	-0.31	-3.08
9,449.0	10.60	217.00	9,321.0	-1,056.5	-793.1	1,320.3	0.23	0.00	-1.27
9,513.0	11.00	214.30	9,383.9	-1,066.2	-800.1	1,332.3	1.01	0.62	-4.22
9,577.0	10.60	212.70	9,446.7	-1,076.2	-806.7	1,344.3	0.78	-0.62	-2.50
9,610.0	10.50	212.60	9,479.2	-1,081.3	-809.9	1,350.3	0.31	-0.30	-0.30
9,674.0	10.70	214.30	9,542.1	-1,091.1	-816.4	1,362.1	0.58	0.31	2.66
9,737.0	9.70	214.00	9,604.1	-1,100.4	-822.7	1,373.2	1.59	-1.59	-0.48
9,801.0	9.10	218.50	9,667.2	-1,108.8	-828.9	1,383.7	1.48	-0.94	7.03
9,864.0	9.10	219.90	9,729.4	-1,116.5	-835.2	1,393.6	0.35	0.00	2.22
9,928.0	9.00	222.80	9,792.6	-1,124.1	-841.8	1,403.6	0.73	-0.16	4.53
9,991.0	9.00	223.60	9,854.9	-1,131.3	-848.6	1,413.4	0.20	0.00	1.27
10,055.0	8.60	224.70	9,918.1	-1,138.3	-855.4	1,423.0	0.68	-0.62	1.72
10,113.0	7.60	226.10	9,975.5	-1,144.0	-861.2	1,431.1	1.76	-1.72	2.41
10,179.0	6.20	225.00	10,041.0	-1,149.6	-866.9	1,438.9	2.13	-2.12	-1.67
10,245.0	5.80	217.50	10,106.7	-1,154.7	-871.4	1,445.7	1.33	-0.61	-11.36
10,308.0	5.10	215.00	10,169.4	-1,159.6	-874.9	1,451.7	1.17	-1.11	-3.97
10,339.0	4.50	217.80	10,200.3	-1,161.6	-876.5	1,454.3	2.08	-1.94	9.03
10,371.0	4.30	216.40	10,232.2	-1,163.6	-878.0	1,456.7	0.71	-0.62	-4.37
10,403.0	4.00	216.80	10,264.1	-1,165.5	-879.3	1,459.0	0.94	-0.94	1.25
10,430.0	3.50	216.60	10,291.1	-1,166.9	-880.4	1,460.8	1.85	-1.85	-0.74
10,461.0	3.20	217.30	10,322.0	-1,168.3	-881.5	1,462.6	0.98	-0.97	2.26
10,493.0	2.80	214.50	10,354.0	-1,169.7	-882.5	1,464.3	1.33	-1.25	-8.75
10,524.0	2.70	214.70	10,384.9	-1,170.9	-883.3	1,465.8	0.32	-0.32	0.65
10,570.9	2.30	213.33	10,431.8	-1,172.6	-884.5	1,467.8	0.86	-0.85	-2.91
5-32-14-20									

Company:	Whiting Petroleum Corporation	**Local Co-ordinate Reference:**	Well UTE Tribal 5-32-14-20
Project:	Uintah County, UT	**TVD Reference:**	WELL @ 7527.0ft (Bronco Rig)
Site:	Section 32-T14S-R20E	**MD Reference:**	WELL @ 7527.0ft (Bronco Rig)
Well:	UTE Tribal 5-32-14-20	**North Reference:**	True
Wellbore:	Well	**Survey Calculation Method:**	Minimum Curvature
Design:	Well	**Database:**	EDM 2003.16 Single User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,583.0	2.20	212.90	10,443.9	-1,173.0	-884.7	1,468.3	0.86	-0.85	-3.58
10,623.0	1.90	222.60	10,483.8	-1,174.1	-885.6	1,469.7	1.14	-0.75	24.25
10,655.0	2.10	223.30	10,515.8	-1,174.9	-886.3	1,470.8	0.63	0.62	2.19
10,687.0	2.10	220.80	10,547.8	-1,175.8	-887.1	1,472.0	0.29	0.00	-7.81
10,719.0	2.10	221.20	10,579.8	-1,176.7	-887.9	1,473.2	0.05	0.00	1.25
10,751.0	2.20	222.90	10,611.8	-1,177.6	-888.7	1,474.3	0.37	0.31	5.31
10,783.0	2.40	221.20	10,643.7	-1,178.6	-889.6	1,475.6	0.66	0.62	-5.31
10,815.0	2.50	220.80	10,675.7	-1,179.6	-890.5	1,477.0	0.32	0.31	-1.25
10,847.0	2.60	224.90	10,707.7	-1,180.6	-891.4	1,478.4	0.65	0.31	12.81
10,879.0	2.60	228.00	10,739.6	-1,181.6	-892.5	1,479.8	0.44	0.00	9.69
10,911.0	2.30	237.50	10,771.6	-1,182.5	-893.6	1,481.1	1.57	-0.94	29.69
10,942.0	2.30	240.20	10,802.6	-1,183.1	-894.6	1,482.2	0.35	0.00	8.71
10,975.0	1.70	259.80	10,835.6	-1,183.5	-895.7	1,483.2	2.73	-1.82	59.39
11,006.0	1.10	251.60	10,866.6	-1,183.7	-896.4	1,483.8	2.04	-1.94	-26.45
11,038.0	1.10	238.80	10,898.5	-1,183.9	-897.0	1,484.3	0.77	0.00	-40.00
11,070.0	1.30	242.80	10,930.5	-1,184.3	-897.6	1,484.9	0.68	0.62	12.50
11,100.0	1.10	242.10	10,960.5	-1,184.6	-898.1	1,485.4	0.67	-0.67	-2.33
11,132.0	1.20	249.60	10,992.5	-1,184.8	-898.7	1,486.0	0.56	0.31	23.44
11,163.0	1.40	243.70	11,023.5	-1,185.1	-899.3	1,486.6	0.78	0.65	-19.03
11,195.0	1.10	241.90	11,055.5	-1,185.4	-900.0	1,487.2	0.95	-0.94	-5.62
11,226.0	1.50	242.40	11,086.5	-1,185.7	-900.6	1,487.8	1.29	1.29	1.61
11,258.0	1.30	242.30	11,118.5	-1,186.1	-901.3	1,488.5	0.63	-0.62	-0.31
11,290.0	1.20	256.90	11,150.5	-1,186.4	-901.9	1,489.1	1.04	-0.31	45.62
11,352.0	1.40	245.10	11,212.5	-1,186.8	-903.2	1,490.2	0.54	0.32	-19.03
11,415.0	1.50	244.20	11,275.4	-1,187.5	-904.7	1,491.6	0.16	0.16	-1.43
11,480.0	1.50	258.80	11,340.4	-1,188.0	-906.3	1,493.0	0.59	0.00	22.46
11,585.0	1.50	255.60	11,445.4	-1,188.6	-909.0	1,495.0	0.08	0.00	-3.05
11,638.0	1.50	255.60	11,498.4	-1,189.0	-910.3	1,496.1	0.00	0.00	0.00
Projected Survey									

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
5-32-14-20	0.00	0.00	10,432.0	-1,170.5	-877.1	7,012,649.39	2,145,306.75	39° 33' 27.450 N	109° 42' 32.730 W
- survey misses by 7.6ft at 10570.9ft MD (10431.8 TVD, -1172.6 N, -884.5 E)									
- Circle (radius 50.0)									

Survey Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
11,638.0	11,498.4	-1,189.0	-910.3	Projected Survey

Checked By: _____ Approved By: _____ Date: _____

Whiting Oil & Gas Corp
1700 Broadway, Suite 2300
Denver, CO 80290
(303) 837-1661

Completion Report Info

Well Name: UTE TRIBAL 5-32-14-20

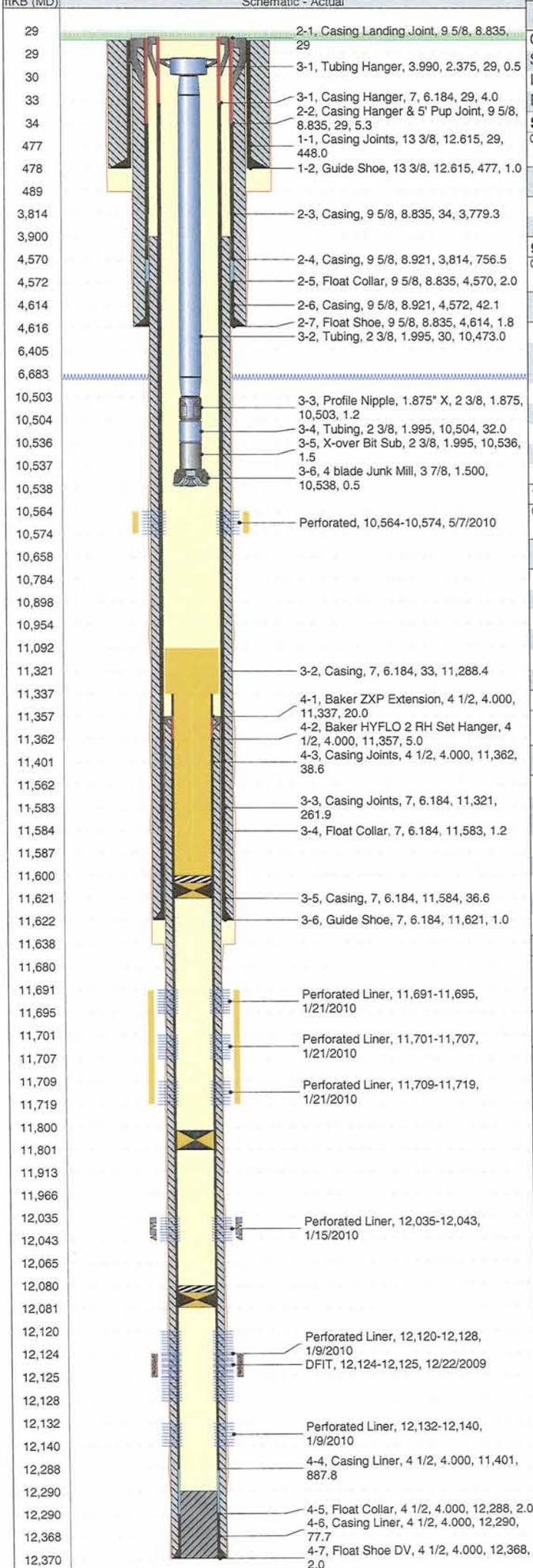
WPC ID	API Number	Well Permit Number	N/S Dist...	N/S ...	E/W Dist (ft)	E/W...	Qtr/Qtr	Sec...	Tow...	Range	Field Name	Operator	County	State
1UT026847	4304739741	UTU-044317	809.0	FNL	1,529.0	FWL	NE/NW	32	14S	20E	Flat Rock	WOGC	Uintah	UT

Gr Elev (ft)	Orig KB Elv (ft)	KB-Grd (ft)	Drilling Contact	Responsible Engineer	Responsible Foreman	Geology Contact	Original Spud Date	Completion Date	First Production Date
7,498.00	7,527.00	29.00	Dana	Tom Smith	Danny Widner	John Forster	10/8/2009	2/17/2010	2/22/2010

Rigs

Contractor	Rig No.	Rig Type	Start Date	RR Date	TD (ft)	TD Date	Comment
White Mountain	750	Drilling	10/8/2009	10/10/2009	489.00	10/10/09	
Bronco Drilling	27	Drilling	10/26/2009	12/3/2009	12,370.00	11/29/09	

Well Config: Deviated/Directional - Original Hole, 6/1/2010 8:57:27 AM



Wellbore Sections

Section	Wellbore Name	Size (in)	Act Top (ftKB)	Act Btm (ftKB)	Start Date	End Date
Conductor	Original Hole	17 1/2	29.0	489.0	10/8/2009	10/9/2009
Surface	Original Hole	12 1/4	489.0	4,616.0	10/27/2009	11/2/2009
Intermediate	Original Hole	8 3/4	4,616.0	11,638.0	11/5/2009	11/24/2009
Production	Original Hole	6	11,638.0	12,370.0	11/27/2009	11/29/2009

Surface Csg, 478.0ftKB

Comment | Run Date: 10/9/2009

OD (in)	Wt (lbs/ft)	Grade	Top (ftKB)	Btm (ftKB)	Len (ft)	Item Description
13 3/8	54.50	J-55	29.0	477.0	447.99	Casing Joints
13 3/8	54.00	J-55	477.0	478.0	1.00	Guide Shoe

9 5/8" Intermediate Csg, 4,616.0ftKB

Comment | Run Date: 11/3/2009

OD (in)	Wt (lbs/ft)	Grade	Top (ftKB)	Btm (ftKB)	Len (ft)	Item Description
9 5/8	40.00	J-55	29.0	29.0	0.00	Casing Landing Joint
9 5/8	40.00	J-55	29.0	34.2	5.25	Casing Hanger & 5' Pup Joint
9 5/8	40.00	J-55	34.2	3,813.6	3,779.33	Casing
9 5/8	36.00	J-55	3,813.6	4,570.1	756.53	Casing
9 5/8	36.00		4,570.1	4,572.1	2.00	Float Collar
9 5/8	36.00		4,572.1	4,614.2	42.07	Casing
9 5/8	36.00		4,614.2	4,616.0	1.85	Float Shoe

7" Intermediate Csg, 11,622.0ftKB

Comment | Run Date: 11/25/2009

OD (in)	Wt (lbs/ft)	Grade	Top (ftKB)	Btm (ftKB)	Len (ft)	Item Description
7	29.00	L-80	29.0	33.0	4.00	Casing Hanger
7	29.00	L-80	33.0	11,321.3	11,288.39	Casing
7	29.00	L-80	11,321.3	11,583.2	261.86	Casing Joints
7	29.00	L-80	11,583.2	11,584.4	1.20	Float Collar
7	29.00	L-80	11,584.4	11,621.0	36.60	Casing
7	29.00	L-80	11,621.0	11,622.0	1.00	Guide Shoe

Liner, 12,370.0ftKB

Comment | Run Date: 12/1/2009

OD (in)	Wt (lbs/ft)	Grade	Top (ftKB)	Btm (ftKB)	Len (ft)	Item Description
4 1/2			11,336.9	11,356.9	20.00	Baker ZXP Extension
4 1/2			11,356.9	11,361.9	5.00	Baker HYFLO 2 RH Set Hanger
4 1/2	11.60	HCP-...	11,361.9	11,400.5	38.64	Casing Joints
4 1/2	11.60	HCP-...	11,400.5	12,288.4	887.84	Casing Liner
4 1/2	11.60	HCP-...	12,288.4	12,290.4	2.00	Float Collar
4 1/2	11.60	HCP-...	12,290.4	12,368.0	77.65	Casing Liner
4 1/2	11.60	HCP-...	12,368.0	12,370.0	2.00	Float Shoe DV

Cement Stages

Description	Pump Start Date	Top (ftKB)	Btm (ftKB)	Top Meas Meth	MD Tagge...
Surface Casing Cement	10/9/2009	29.0	478.0	Returns to Surface	

Wellbore	Fluid Type	Amount (sa...)	Class	Est Top (ftKB)	Est Btm (ftKB)	V (bbl)
Original Hole	General		Regular	29.0	478.0	129.0

Description	Pump Start Date	Top (ftKB)	Btm (ftKB)	Top Meas Meth	MD Tagge...
Intermediate Casing Cement	11/3/2009	29.0	4,616.0		

Wellbore	Fluid Type	Amount (sa...)	Class	Est Top (ftKB)	Est Btm (ftKB)	V (bbl)
Original Hole	Lead Cement	625	Lite	29.0	4,000.0	425.0
Original Hole	Tail Cement	240	Premium	4,000.0	4,616.0	61.0
Original Hole	Displace...			0.0	4,555.0	350.0

Description	Pump Start Date	Top (ftKB)	Btm (ftKB)	Top Meas Meth	MD Tagge...
Intermediate Casing Cement	11/26/2009	3,900.0	11,622.0	Acoustic Log	

Wellbore	Fluid Type	Amount (sa...)	Class	Est Top (ftKB)	Est Btm (ftKB)	V (bbl)
Original Hole	Preflush	25		3,000.0	3,900.0	30.0
Original Hole	Lead Cement	530	Prem Plus	3,900.0	10,300.0	165.0
Original Hole	Tail Cement	145	Prem Plus	10,300.0	11,622.0	44.0
Original Hole	Displace...			0.0	11,622.0	

Report Printed: 6/1/2010

Whiting Oil & Gas Corp
1700 Broadway, Suite 2300
Denver, CO 80290
(303) 837-1661

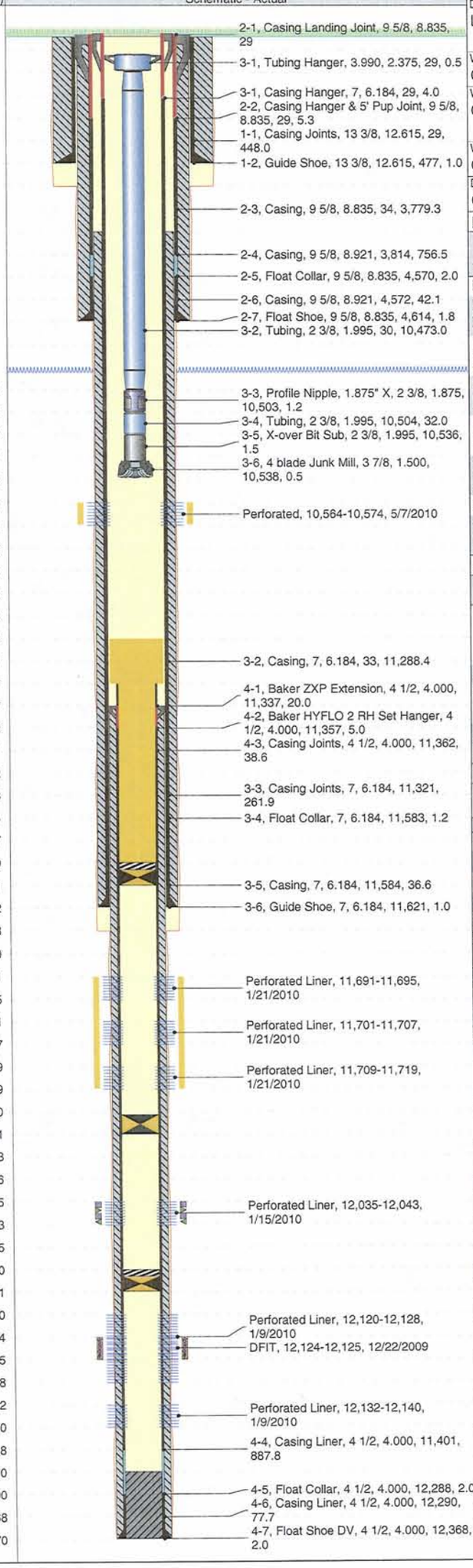
Completion Report Info

Well Name: UTE TRIBAL 5-32-14-20

WPC ID	API Number	Well Permit Number	N/S Dist...	N/S ...	E/W Dist (ft)	E/W...	Qtr/Qtr	Sec...	Tow...	Range	Field Name	Operator	County	State
1UT026847	4304739741	UTU-044317	809.0	FNL	1,529.0	FWL	NE/NW	32	14S	20E	Flat Rock	WOGC	Uintah	UT

Gr Elev (ft)	Orig KB Elv (ft)	KB-Grd (ft)	Drilling Contact	Responsible Engineer	Responsible Foreman	Geology Contact	Original Spud Date	Completion Date	First Production Date
7,498.00	7,527.00	29.00	Dana	Tom Smith	Danny Widner	John Forster	10/8/2009	2/17/2010	2/22/2010

Well Config: Deviated/Directional - Original Hole, 6/1/2010 8:57:27 AM



Cement Stages

Description	Pump Start Date	Top (ftKB)	Btm (ftKB)	Top Meas Meth	MD Tagge...
Liner Cement	12/2/2009	11,357.0	12,370.0	Volume Calculations	

Wellbore	Fluid Type	Amount (sa...)	Class	Est Top (ftKB)	Est Btm (ftKB)	V (bbl)
Original Hole	Preflush					
Original Hole	Production Cement	60	50/50 POZ	11,357.0	12,370.0	21.0
Original Hole	Displace...			0.0	12,370.0	

Description	Pump Start Date	Top (ftKB)	Btm (ftKB)	Top Meas Meth	MD Tagge...
Cement Plug	12/2/2009	12,290.0	12,370.0		

Perforations

Type of Hole	Date	Top (ftKB)	Btm (ftKB)	Zone	Shot Dens (sho...	Cal... Shot Total
Perforat...	5/7/2010	10,564.0	10,574.0	Dakota Silt, Original Hole	3.0	30
Perforat... Liner	1/21/2010	11,691.0	11,695.0	Entrada, Original Hole	3.0	12
Perforat... Liner	1/21/2010	11,701.0	11,707.0	Entrada, Original Hole	3.0	18
Perforat... Liner	1/21/2010	11,709.0	11,719.0	Entrada, Original Hole	3.0	30
Perforat... Liner	1/15/2010	12,035.0	12,043.0	Kayenta, Original Hole	3.0	24
Perforat... Liner	1/9/2010	12,120.0	12,128.0	Wingate, Original Hole	3.0	24
DFIT	12/22/2009	12,124.0	12,125.0	Wingate, Original Hole	4.0	4
Perforat... Liner	1/9/2010	12,132.0	12,140.0	Wingate, Original Hole	3.0	24

Stim/Treat Stages

Stage Type	Start Date	Top (ftKB)	Btm (ftKB)	Stim/Treat Fluid	V (pumped) (bbl)
Frac	5/12/2010	10,564.0	10,574.0	7880# 100 Mesh,150240# 20/40 PRC,30Q pHasfrac,92tn, CO2	1490.00
Frac	1/22/2010	11,691.0	11,719.0	10K# Jordan sd, Frac	1236.00
Frac	1/22/2010	11,691.0	11,719.0	80160# 30-50 Tempered LC, 30Q CO2, Foam Frac	1402.00
Acidizat...	1/19/2010	12,035.0	12,043.0	10% HCl, Breakdown	24.00
Breakd...	12/23/2009	12,124.0	12,125.0	10% HCl, Breakdown	44.50

Tubing Strings

Set Depth (ftKB): 11,504.0 | Comment: | Run Date: 2/11/2010 | Pull Date: 5/5/2010

Item Description	OD (in)	Jts	Len (ft)	Top (ftKB)	Btm (ftKB)
Tubing Hanger	2 3/8		0.50	29.0	29.5
Tubing	2 3/8	354	11,440.88	29.5	11,470.4
Profile Nipple	2 3/8		1.20	11,470.4	11,471.6
Tubing	2 3/8	1	32.00	11,471.6	11,503.6
Collar	3 1/16		0.40	11,503.6	11,504.0

Set Depth (ftKB): 10,538.0 | Comment: | Run Date: 5/17/2010 | Pull Date:

Item Description	OD (in)	Jts	Len (ft)	Top (ftKB)	Btm (ftKB)
Tubing Hanger	3.99		0.50	29.3	29.8
Tubing	2 3/8	322	10,473.00	29.8	10,502.8
Profile Nipple, 1.875" X	2 3/8		1.20	10,502.8	10,504.0
Tubing	2 3/8	1	32.00	10,504.0	10,536.0
X-over Bit Sub	2 3/8		1.50	10,536.0	10,537.5
4 blade Junk Mill	3 7/8		0.50	10,537.5	10,538.0

Rods

Rod Description	Comment	Run Date	Pull Date

Item Description	OD (in)	Len (ft)	Top (ftKB)	Btm (ftKB)

Other Strings

Set Depth (ftKB)	Comment	Run Date	Pull Date

Item Description	OD (in)	Len (ft)	Top (ftKB)	Btm (ftKB)	ID (in)

Other In Hole

Description	OD (in)	Run Date	Pull Date	Top (ftKB)	Bottom (ftKB)
Frac Sand Fill	5 7/8	5/12/2010		11,092.0	11,337.0
Comment					
Frac Sand Fill	3.999	5/12/2010		11,337.0	11,600.0
Comment					

Report Printed: 6/1/2010

Whiting Oil & Gas Corp
1700 Broadway, Suite 2300
Denver, CO 80290
(303) 837-1661

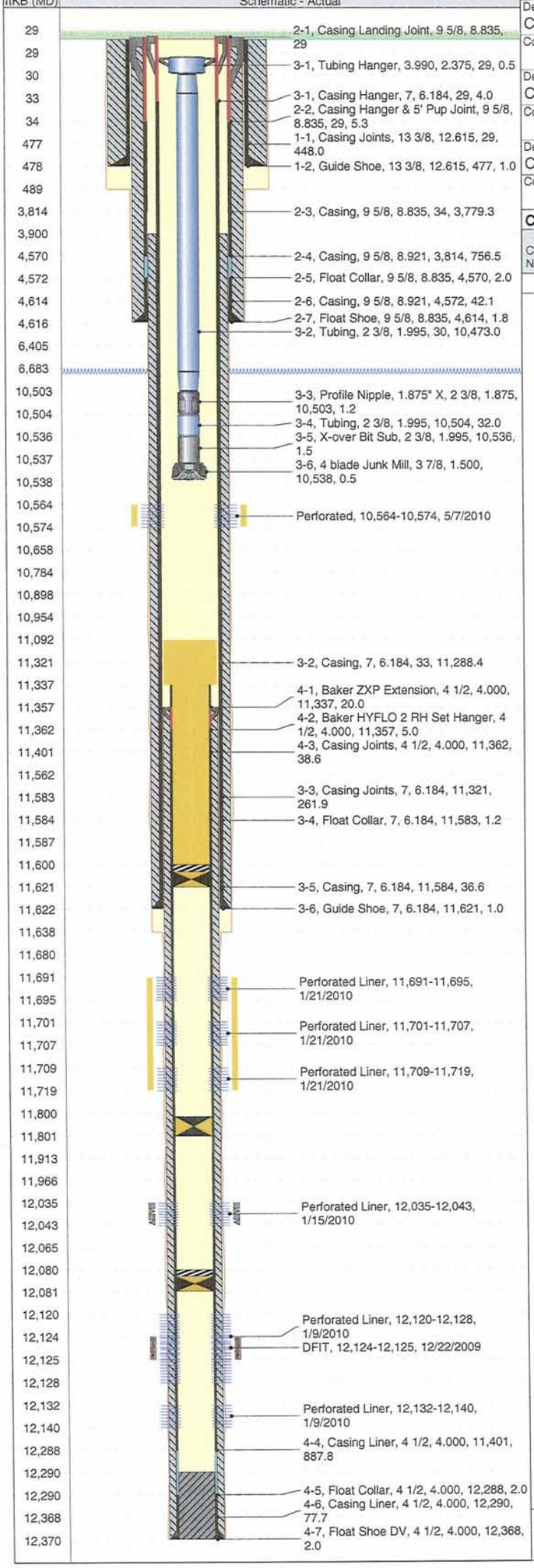
Completion Report Info

Well Name: UTE TRIBAL 5-32-14-20

WPC ID	API Number	Well Permit Number	N/S Dist...	N/S ...	E/W Dist (ft)	E/W...	Qtr/Qtr	Sec...	Tow...	Range	Field Name	Operator	County	State
1UT026847	4304739741	UTU-044317	809.0	FNL	1,529.0	FWL	NE/NW	32	14S	20E	Flat Rock	WOGC	Uintah	UT

Gr Elev (ft)	Orig KB Elv (ft)	KB-Grd (ft)	Drilling Contact	Responsible Engineer	Responsible Foreman	Geology Contact	Original Spud Date	Completion Date	First Production Date
7,498.00	7,527.00	29.00	Dana	Tom Smith	Danny Widner	John Forster	10/8/2009	2/17/2010	2/22/2010

Well Config: Deviated/Directional - Original Hole, 6/1/2010 8:57:27 AM



Other In Hole

Description	OD (in)	Run Date	Pull Date	Top (ftKB)	Bottom (ftKB)
Cmtd Cast Iron Bridge Plug	3.999	5/7/2010		11,600.0	11,621.0
Comment					
Description	OD (in)	Run Date	Pull Date	Top (ftKB)	Bottom (ftKB)
Comp BP	3.999	1/21/2010		11,800.0	11,801.0
Comment					
Description	OD (in)	Run Date	Pull Date	Top (ftKB)	Bottom (ftKB)
Cmtd Cast Iron Bridge Plug	3.99	1/13/2010		12,080.0	12,081.0
Comment					

Cores

C... No.	Date	Wellbore	Top (ftKB)	Btm (ftKB)	Recov (ft)	% Recov (%)	Comment

Report Printed: 6/1/2010

FORM 9

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

5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-044317

SUNDRY NOTICES AND REPORTS ON WELLS

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute Indian Tribe (surface)

7. UNIT or CA AGREEMENT NAME:

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: OIL WELL ☐ GAS WELL ☑ OTHER

8. WELL NAME and NUMBER: Ute Tribal 5-32-14-20

2. NAME OF OPERATOR: Whiting Oil and Gas Corporation

9. API NUMBER: 4304739741

3. ADDRESS OF OPERATOR: 1700 Broadway, Suite 2300 CITY Denver STATE CO ZIP 80290

PHONE NUMBER: (303) 837-1661

10. FIELD AND POOL, OR WILDCAT: Flat Rock/Entrada

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 809 FNL 1529 FWL

COUNTY: Uintah

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NENW 32 14S 20E

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: _____	☐ 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: 2/22/2010	☐ 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.

Produced water is trucked off production site to one of 5 disposal sites, located in Uintah/Duchesne counties. Copies of State approvals attached.

Ace Oilfield Disposal
Sec 2-6S-20E
Uintah County

Wonsite Disposal
Sec 35-45N-78W
Uintah County

Glen Bench Disposal
NWNE Sec 5-9S-22E
Uintah County

Seep Ridge Disposal
SE Sec 36-10S-20E
Uintah County

Bluebell Disposal
Sec 9-2S-2W
Duchesne County

Water trucked and pits operated by
RN Industries, Inc.
P. O. Box 98
Roosevelt, UT 84066
435-722-2800

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY

NAME (PLEASE PRINT) Pauleen Tobin TITLE Engineering Technician

SIGNATURE _____ DATE 6/8/10

(This space for State use only)

RECEIVED
JUN 14 2010
DIV. OF OIL, GAS & MINING

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

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-044317

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute Indian Tribe (surface)

7. UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER

8. WELL NAME and NUMBER: Ute Tribal 5-32-14-20

2. NAME OF OPERATOR: Whiting Oil and Gas Corporation

9. API NUMBER: 4304739741

3. ADDRESS OF OPERATOR: 1700 Broadway, Suite 2300 CITY Denver STATE CO ZIP 80290

PHONE NUMBER: (303) 837-1661

10. FIELD AND POOL, OR WILDCAT: Flat Rock

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 809 FNL 1529 FWL

COUNTY: Uintah

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NENW 32 14S 20E

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:	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
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	☐ 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: 5/31/2010	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☑ OTHER: Monthly Completion status Rpt
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

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

05/2010
MIRU. FCP=350 psi open to sales. Blow down, RIH, set CBP @ 11620', dump 20' cmt on CBP. Load csg w/312 bbls 2% KCl wtr. Pressure to 5000#. Held 5 mins. Bled off. RIH w/ 3 1/8" x 10' perf gun, perf Dakota Silt fr/10564'-74', 3 spf, 30 holes. POOH. RIH w/tandem press recorders to 7000', press @ 3 bpm. Formation broke @ 3392#. Increase rate to 7 bpm & pump 35 bbls, 3620# max, 3475# ISIP, 5 mins 3194#, 10 mins 3070#, 15 mins 2955#. FG .84 monitor press 1 hr @ csg valve. POOH. Surface press after 39.5 hr fall off test is 947 psig, BHSIP=4016 psig @ 7000' (0.4384 psi/ft grad). No gas evolved during SI. Analyze DFIT. NU frac tree, frac w/HES 30Q Foam using 1490 BW, 7500# 100 Mesh sand 143120# 20/40 sand, 92 tons CO2. Form broke @ 4462#, avg rate 28.8 bpm, max rate 34.9 bpm, avg psi 4342#, max psi 7537#. Pumped 334 bbls flush, leaving 56 bbls 30Q foam w/7500# sand in csg, ISIP=7537#, 5mins-6850#, 10mins=6580#, 15mins=6386#. SI. Open to flowback on 48" ck, ck back to 20". Turn over to flowback crew, unloading, swab 22 bbls in 6 runs, tbg flowed water w/sand for 5 hrs. Tbg died. Swab 50 bbls in 8 runs, con't swabbing back frac fluid, rec'g foamy water w/CO2, no gas. SI for PBU. Open tbg to pit, unload 25 bbls, turned to heavy mist flowing @ 440# FTP, pressure dropped to 75#. Attempt to burn gas, no burn. SI.

NAME (PLEASE PRINT) Pauleen Tobin TITLE Engineering Technician

SIGNATURE [signature] DATE 7/2/10

(This space for State use only)

RECEIVED
JUL 06 2010
DIV. OF OIL, GAS & MINING

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

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

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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7. UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER

8. WELL NAME and NUMBER: Ute Tribal 5-32-14-20

2. NAME OF OPERATOR: Whiting Oil and Gas Corporation

9. API NUMBER: 4304739741

3. ADDRESS OF OPERATOR: 1700 Broadway, Suite 2300 CITY Denver STATE CO ZIP 80290

PHONE NUMBER: (303) 837-1661

10. FIELD AND POOL, OR WILDCAT: Flat Rock

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 809 FNL 1529 FWL

COUNTY: Uintah

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NENW 32 14S 20E

STATE: UTAH

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☐ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start:	☐ 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
6/30/2010	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☑ OTHER: Monthly Completion status Rpt
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

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

06/2010
Open to pit gas now burnable. SI PBU. Hook up to gath sys and sales, producing from Dakota Silt.

NAME (PLEASE PRINT) Pauleen Tobin TITLE Engineering Technician

SIGNATURE DATE 7/2/10

(This space for State use only)

RECEIVED
JUL 06 2010
DIV. OF OIL, GAS & MINING

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

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

FORM 6

ENTITY ACTION FORM

Operator: Whiting Oil and Gas Corporation
Operator Account Number: N 2680
Address: 1700 Broadway, Suite 2300
city Denver
state CO zip 80290
Phone Number: (303) 837-1661

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304739741	Ute Tribal 5-32-14-20		NENW	32	14S	20E	Uintah
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
E	17406	17406	10/8/2009			2/17/2010	

Comments: From Wingt to DKENT — 7/28/10

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304739739	Ute Tribal 3-30-14-20		NENW	30	14S	20E	Uintah
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
E	17526	17526	2/19/2010			5/6/2010	

Comments: From Wingt to Entrada — 7/28/10

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)

RECEIVED
JUL 28 2010
DIV. OF OIL, GAS & MINING

Pauleen Tobin
Name (Please Print)
Signature
Engineering Tech
Title
7/28/10
Date

(5/2000)

Division of Oil, Gas and Mining
Operator Change/Name Change Worksheet-for State use only

Effective Date: 8/1/2015

FORMER OPERATOR:	NEW OPERATOR:
WHITING OIL & GAS CORPORATION N2680 1700 BROADWAY SUITE 2300 DENVER CO 80290	COBRA OIL & GAS CORPORATION N4270 PO BOX 8206 WICHITA FALS TX 76307-8206
CA Number(s):	Unit Name: None

WELL INFORMATION:

Well Name	Sec	TWN	RNG	API	Entity	Mineral	Surface	Type	Status
See Attached List									

OPERATOR CHANGES DOCUMENTATION:

1. Sundry or legal documentation was received from the **FORMER** operator on: 8/4/2015
2. Sundry or legal documentation was received from the **NEW** operator on: 8/4/2015
3. New operator Division of Corporations Business Number: 9442951-0143

REVIEW:

1. Surface Agreement Sundry from **NEW** operator on Fee Surface wells received on: N/A
2. Receipt of Acceptance of Drilling Procedures for APD on: N/A
3. Reports current for Production/Disposition & Sundries: 10/5/2015
4. OPS/SI/TA well(s) reviewed for full cost bonding: 10/2/2015
5. UIC5 on all disposal/injection/storage well(s) approved on: N/A
6. Surface Facility(s) included in operator change: Chimney Rock Compressor
   Flat Rock Compressor
7. Inspections of PA state/fee well sites complete on (only upon operators request): 10/15/2015

NEW OPERATOR BOND VERIFICATION:

1. Federal well(s) covered by Bond Number: B009425
2. Indian well(s) covered by Bond Number: B009425
3. State/fee well(s) covered by Bond Number(s): B009455
   B009568-FCB
   B009567-FCB
   B009566-FCB

DATA ENTRY:

1. Well(s) update in the **OGIS** on: 10/14/2015
2. Entity Number(s) updated in **OGIS** on: 10/14/2015
3. Unit(s) operator number update in **OGIS** on: N/A
4. Surface Facilities update in **OGIS** on: N/A
5. State/Fee well(s) attached to bond(s) in **RBDMS** on: 10/14/2015
6. Surface Facilities update in **RBDMS** on: 10/14/2015

LEASE INTEREST OWNER NOTIFICATION:

1. The **NEW** operator of the Fee (Mineral) wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: N/A

COMMENTS:

From: Whiting Oi Gas Corporation
To: Cobra Oil Gas Corporation
Effective:8/1/2015

Well Name	Section	TWN	RNG	API Number	Entity	Mineral	Surface	Type	Status
UTE TRIBAL 32-5A	32	140S	200E	4304710577	12655	State	Indian	GW	P
UTE TRIBAL 30-3A	30	140S	200E	4304710913	12395	Federal	Indian	OW	P
UTE TRIBAL 29-1A	29	140S	200E	4304730981	8118	Federal	Indian	GW	P
UTE TRIBAL 32-2A	32	140S	200E	4304733333	12658	State	Indian	GW	P
UTE TRIBAL 32-6A	32	140S	200E	4304733337	12662	State	Indian	GW	P
CHIMNEY ROCK 32-13	32	130S	210E	4304733447	12985	State	State	GW	P
CHIMNEY ROCK 32-14	32	130S	210E	4304733448	12983	State	State	GW	P
UTE TRIBAL 32-8A	32	140S	200E	4304733557	13066	State	Indian	GW	P
UTE TRIBAL 32-12A	32	140S	200E	4304733558	13064	State	Indian	GW	P
UTE TRIBAL 30-6A	30	140S	200E	4304733596	13062	Federal	Indian	GW	P
UTE TRIBAL 29-5A	29	140S	200E	4304733617	13061	Federal	Indian	GW	P
UTE TRIBAL 32-7A	32	140S	200E	4304733618	13065	State	Indian	GW	P
UTE TRIBAL 32-9A	32	140S	200E	4304733619	13067	State	Indian	GW	P
UTE TRIBAL 32-10A	32	140S	200E	4304733620	13054	State	Indian	GW	P
UTE TRIBAL 32-16A	32	140S	200E	4304734098	13449	State	Indian	GW	P
UTE TRIBAL 29-6A	29	140S	200E	4304734102	13443	Federal	Indian	GW	P
UTE TRIBAL 29-7A	29	140S	200E	4304734103	13444	Federal	Indian	GW	P
UTE TRIBAL 10-2-15-20	2	150S	200E	4304735625	14167	State	Indian	GW	P
FLAT ROCK 13-29-14-20	29	140S	200E	4304736778	15065	Federal	Indian	GW	P
FLAT ROCK 3-29-14-20	29	140S	200E	4304736795	15099	Federal	Indian	GW	P
UTE TRIBAL 6-16-14-20	16	140S	200E	4304738506	16320	State	Indian	GW	P
UTE TRIBAL 15-25-14-19	30	140S	200E	4304739052	16169	Indian	Indian	GW	P
UTE TRIBAL 1-30-14-20	30	140S	200E	4304739665	16997	Federal	Indian	GW	P
UTE TRIBAL 3-30-14-20	30	140S	200E	4304739739	17526	Federal	Indian	GW	P
UTE TRIBAL 11-30-14-20	30	140S	200E	4304739740	17358	Federal	Indian	GW	P
UTE TRIBAL 5-32-14-20	32	140S	200E	4304739741	17406	State	Indian	GW	P
UTE TRIBAL 15-30-14-20	30	140S	200E	4304739942	17237	Federal	Indian	GW	P
UTE TRIBAL 1-25-14-19	30	140S	200E	4304750654	17454	Indian	Indian	GW	P
UTE TRIBAL 13-25-14-19	26	140S	190E	4304750689	17808	Indian	Indian	GW	P
UTE TRIBAL 5-25-14-19	26	140S	190E	4304750690	17760	Indian	Indian	GW	P
UTE TRIBAL 3-25-14-19	30	140S	200E	4304751030	17759	Indian	Indian	GW	P
CHIMNEY ROCK 32-11	32	130S	210E	4304733445	12984	State	State	GW	PA
UTE TRIBAL 32-11A	32	140S	200E	4304733621	13058	State	Indian	GW	PA
FLAT ROCK 13-32-14-20	32	140S	200E	4304736992	17354	State	Indian	D	PA
FLAT ROCK 14-32-14-20	32	140S	200E	4304736993	17355	State	Indian	D	PA
FLAT ROCK 15-32-14-20	32	140S	200E	4304736994	17356	State	Indian	D	PA
UTE TRIBAL 8-25-14-19	30	140S	200E	4304739053	17353	Indian	Indian	D	PA
UTE TRIBAL 30-5A	30	140S	200E	4304720502	12654	Federal	Indian	GW	S
UTE TRIBAL 30-2A	30	140S	200E	4304730641	8112	Federal	Indian	GW	S
UTE TRIBAL 32-1A	32	140S	200E	4304732758	12064	State	Indian	OW	S
UTE TRIBAL 29-2A	29	140S	200E	4304732945	8118	Federal	Indian	OW	S
UTE TRIBAL 32-3A	32	140S	200E	4304733334	12657	State	Indian	GW	S
UTE TRIBAL 32-4A	32	140S	200E	4304733335	12656	State	Indian	GW	S
UTE TRIBAL 28-1A	28	140S	200E	4304733595	13059	Federal	Indian	GW	S
UTE TRIBAL 29-4A	29	140S	200E	4304733616	13060	Federal	Indian	GW	S

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:	See attached exhibit
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	See attached exhibit
7. UNIT or CA AGREEMENT NAME:	See attached exhibit
1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☐ OTHER See attached exhibit	8. WELL NAME and NUMBER: See attached exhibit
2. NAME OF OPERATOR: COBRA OIL & GAS CORPORATION N4270	9. API NUMBER: See attach
3. ADDRESS OF OPERATOR: PO Box 8206 Wichita Falls TX 76307-8206 / PHONE NUMBER: (940) 716-5100	10. FIELD AND POOL, OR WILDCAT: See attached exhibit
4. LOCATION OF WELL FOOTAGES AT SURFACE: See attached exhibit QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:	COUNTY: Uintah 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) Approximate date work will start: _____	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
	☐ 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) Date of work completion: 8/1/2015	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
	☐ 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.

Effective August 1, 2015, Whiting Oil & Gas Corporation resigned as Operator of the wells listed on the attached Exhibit, and Cobra Oil & Gas Corporation has been designated as successor Operator.

Cobra Oil & Gas Corporation
PO Box 8206
Wichita Falls, TX 76307-8206
Phone: (940) 716-5100

Whiting Oil & Gas Corporation N2680
1700 Broadway, Suite 2300
Denver, CO 80290
Phone: (303) 837-1661

Rick Ross, Senior Vice President - Operations

Bonds through U.S. Specialty Insurance Company
Utah State Bond: B009455
BLM Nationwide Bond: B009425

NAME (PLEASE PRINT) Robert W. Osborne TITLE Vice President

SIGNATURE Robert W Osborne DATE 7/14/15

(This space for State use only)

APPROVED

OCT 14 2015

DIV. OIL GAS & MINING

BY: Rachel Medina

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

Well Exhibit for Utah DOGM

LEASE/UNIT	Lease #	Tribe Name	API #	FIELD	COUNTY	STATE	RESERVOIR	LOCATION: SEC - TWP - RNG
CHIMNEY ROCK 32-11	ML-47437		4304733445	SEEP RIDGE B	UINTAH	UT	DAKOTA	32-T13S-R21E
CHIMNEY ROCK 32-13	ML-47437		4304733447	SEEP RIDGE B	UINTAH	UT	DAKOTA-CEDAR MOUNTAIN	32-T13S-R21E
CHIMNEY ROCK 32-14	ML-47437		4304733448	SEEP RIDGE B	UINTAH	UT	DAKOTA-CEDAR MOUNTAIN	32-T13S-R21E
FLAT ROCK 13-29-14-20	UTU10166		4304736778	FLAT ROCK	UINTAH	UT	ENTRADA	29-T14S-R20E
FLAT ROCK 13-32-14-20	ML-44317		4304736992	FLAT ROCK	UINTAH	UT	WINGT	32-T14S-R20E
FLAT ROCK 14-32-14-20	ML-44317		4304736993	FLAT ROCK	UINTAH	UT	MESA VERDE	32-T14S-R20E
FLAT ROCK 15-32-14-20	ML-44317		4304736994	FLAT ROCK	UINTAH	UT	MESA VERDE	32-T14S-R20E
FLAT ROCK 30-3A	UTU019837		~~4304730729~~	FLAT ROCK	UINTAH	UT	N/A	30-T14S-R20E
FLAT ROCK 3-29-14-20	UTU10166		4304736795	FLAT ROCK	UINTAH	UT	ENTRADA	29-T14S-R20E
UTE TRIBAL 10-2-15-20	ML-46842		4304735625	FLAT ROCK	UINTAH	UT	WASATCH	2-T15S-R20E
UTE TRIBAL 11-30-14-20	UTU019837		4304739740	FLAT ROCK	UINTAH	UT	DAKOTA-BUCKHORN	30-T14S-R20E
UTE TRIBAL 1-25-14-19	1420H625581	Ute Tribe	4304750654	FLAT ROCK	UINTAH	UT	ENTRADA	30-T14S-R20E
UTE TRIBAL 1-30-14-20	UTU019837		4304739665	FLAT ROCK	UINTAH	UT	ENTRADA	30-T14S-R20E
UTE TRIBAL 13-25-14-19	1420H625581	Ute Tribe	4304750689	FLAT ROCK	UINTAH	UT	ENTRADA	26-T14S-R19E
UTE TRIBAL 15-25-14-19	1420H625581	Ute Tribe	4304739052	FLAT ROCK	UINTAH	UT	ENTRADA	30-T14S-R20E
UTE TRIBAL 15-30-14-20	UTU019837		4304739942	FLAT ROCK	UINTAH	UT	ENTRADA	30-T14S-R20E
UTE TRIBAL 28-1A	UTU10166		4304733595	FLAT ROCK	UINTAH	UT	DAKOTA	28-T14S-R20E
UTE TRIBAL 29-1A	UTU10166		4304730981	FLAT ROCK	UINTAH	UT	WASATCH	29-T14S-R20E
UTE TRIBAL 29-2A	UTU10166		4304732945	FLAT ROCK	UINTAH	UT	WASATCH	29-T14S-R20E
UTE TRIBAL 29-3A	UTU10166		4304732946	FLAT ROCK	UINTAH	UT	WASATCH	29-T14S-R20E
UTE TRIBAL 29-4A	UTU10166		4304733616	FLAT ROCK	UINTAH	UT	DAKOTA	29-T14S-R20E
UTE TRIBAL 29-5A	UTU10166		4304733617	FLAT ROCK	UINTAH	UT	CEDAR MOUNTAIN	29-T14S-R20E
UTE TRIBAL 29-6A	UTU10166		4304734102	FLAT ROCK	UINTAH	UT	CURTIS-ENTRADA	29-T14S-R20E
UTE TRIBAL 29-7A	UTU10166		4304734103	FLAT ROCK	UINTAH	UT	CURTIS-ENTRADA	29-T14S-R20E
UTE TRIBAL 30-1	UTU019837		~~4304715764~~	FLAT ROCK	UINTAH	UT	WASATCH	30-T14S-R20E
UTE TRIBAL 30-2A	UTU019837		4304730641	FLAT ROCK	UINTAH	UT	WASATCH	30-T14S-R20E
UTE TRIBAL 30-3A	UTU019837		4304710913	FLAT ROCK	UINTAH	UT	WASATCH	30-T14S-R20E
UTE TRIBAL 30-4A	UTU019837		4304716520	FLAT ROCK	UINTAH	UT	TW	30-T14S-R20E
UTE TRIBAL 30-5A	UTU019837		4304720502	FLAT ROCK	UINTAH	UT	WASATCH	30-T14S-R20E
UTE TRIBAL 30-6A	UTU019837		4304733596	FLAT ROCK	UINTAH	UT	DAKOTA	30-T14S-R20E
UTE TRIBAL 32-10A	ML-44317		~~4304733620~~	FLAT ROCK	UINTAH	UT	WASATCH	32-T14S-R20E
UTE TRIBAL 32-11A	ML-44317		4304733621	FLAT ROCK	UINTAH	UT	WASATCH	32-T14S-R20E
UTE TRIBAL 32-12A	ML-44317		4304733558	FLAT ROCK	UINTAH	UT	CEDAR MOUNTAIN	32-T14S-R20E
UTE TRIBAL 32-16A	ML-44317		4304734098	FLAT ROCK	UINTAH	UT	DAKOTA-CEDAR MOUNTAIN	32-T14S-R20E
UTE TRIBAL 32-1A	ML-44317		4304732758	FLAT ROCK	UINTAH	UT	WASATCH	32-T14S-R20E
UTE TRIBAL 32-2A	ML-44317		4304733333	FLAT ROCK	UINTAH	UT	WASATCH	32-T14S-R20E
UTE TRIBAL 32-3A	ML-44317		4304733334	FLAT ROCK	UINTAH	UT	WASATCH-MESAVERDE	32-T14S-R20E
UTE TRIBAL 32-4A	ML-44317		4304733335	FLAT ROCK	UINTAH	UT	WASATCH	32-T14S-R20E
UTE TRIBAL 3-25-14-19	1420H625581	Ute Tribe	4304751030	FLAT ROCK	UINTAH	UT	ENTRADA	30-T14S-R20E

Well Exhibit for Utah DOGM

LEASE/UNIT	Lease #	Tribe Name	API #	FIELD	COUNTY	STATE	RESERVOIR	LOCATION: SEC - TWP - RNG
UTE TRIBAL 32-5A	ML-44317		4304710577	FLAT ROCK	UINTAH	UT	WASATCH	32-T14S-R20E
UTE TRIBAL 32-6A	ML-44317		4304733337	FLAT ROCK	UINTAH	UT	WASATCH	32-T14S-R20E
UTE TRIBAL 32-7A	ML-44317		4304733618	FLAT ROCK	UINTAH	UT	WASATCH	32-T14S-R20E
UTE TRIBAL 32-8A	ML-44317		4304733557	FLAT ROCK	UINTAH	UT	DAKOTA	32-T14S-R20E
UTE TRIBAL 32-9A	ML-44317		4304733619	FLAT ROCK	UINTAH	UT	DAKOTA-CEDAR MOUNTAIN	32-T14S-R20E
UTE TRIBAL 3-30-14-20	UTU019837		4304739739	FLAT ROCK	UINTAH	UT	ENTRADA	30-T14S-R20E
UTE TRIBAL 5-25-14-19	1420H625581	Ute Tribe	4304750690	FLAT ROCK	UINTAH	UT	ENTRADA	26-T14S-R19E
UTE TRIBAL 5-32-14-20	ML-44317		4304739741	FLAT ROCK	UINTAH	UT	DAKOTA ENTRADA	32-T14S-R20E
UTE TRIBAL 6-16-14-20	ML-47502		4304738506	FLAT ROCK	UINTAH	UT	ENTRADA	16-T14S-R20E
UTE TRIBAL 8-25-14-19	1420H625581	Ute Tribe	4304739053	FLAT ROCK	UINTAH	UT	N/A	30-T14S-R20E

RECEIVED
AUG 04 2015
DIV. OF OIL, GAS & MINING

July 16, 2015

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

Re: Change of Operator

Whiting Oil and Gas Corporation respectfully submits change of operator sundries for Flat Rock field in Uintah County, UT.

The new operator is
Cobra Oil and Gas Corporation
PO Box 8206
Witchita Falls, TX 76307-8206
Phone: (940) 716-5100

Regulatory Admin for Cobra:
Barbara Pappas
940-716-5103
Barbara@cobraogc.com

Please contact Barbara Pappas or myself if you should have questions or need additional information.

Best Regards,

Cara Mezydlo,
Engineering Technician III – Central Rockies Asset Group
(303) 876-7091
Cara.mezydlo@whiting.com

RECEIVED
AUG 04 2015
DIV. OF OIL, GAS & MINING

July 16, 2015

Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Box 145801
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Regulatory Admin for Cobra:
Barbara Pappas
940-716-5103
Barbara@cobraogc.com

Please contact Barbara Pappas or myself if you should have questions or need additional information.

Best Regards,

Cara Mezydlo,
Engineering Technician III – Central Rockies Asset Group
(303) 876-7091
Cara.mezydlo@whiting.com

Rachel Medina <rachelmedina@utah.gov>

Plugged Wells

8 messages

Rachel Medina <rachelmedina@utah.gov> Thu, Aug 6, 2015 at 11:05 AM
To: Barbara Pappas <barbara@cobraogc.com>

Hi Barbara,

The following Whiting wells are listed on the request for the Cobra operator change, but are currently plugged. Our Division does not usually move plugged well unless the new operator has plans to reenter the wells. Will this be the case for Cobra?

CHIMNEY ROCK 32-11	32	130S	210E	4304733445
UTE TRIBAL 32-11A	32	140S	200E	4304733621
FLAT ROCK 13-32-14-20	32	140S	200E	4304736992
FLAT ROCK 14-32-14-20	32	140S	200E	4304736993
FLAT ROCK 15-32-14-20	32	140S	200E	4304736994
UTE TRIBAL 8-25-14-19	30	140S	200E	4304739053

Also, the following wells were listed on the exhibit but are not currently operated by Whiting. They will not move in the operator change.

Flat Rock 30-3A 4304730729
Ute Tribal 30-1 4304715764
Ute Tribal 30-4A 4304716520

Thanks!

--
Rachel Medina
Division of Oil, Gas & Mining
Bonding Technician
801-538-5260

Rachel Medina <rachelmedina@utah.gov> Thu, Aug 6, 2015 at 2:36 PM
To: Barbara Pappas <barbara@cobraogc.com>

Hi Barbara,

Cobra is also taking over 3 State/Fee wells that have been shut in for over a year. Because of this our Petroleum Engineer is requesting a shut in plan and full cost bonding. For the shut in plan you will need to submit an outline and time frame of the plans for each well. To determine full cost bonding you will need to submit a plugging estimate, our engineer will evaluate the cost and set the bond for each well at the estimate or depth bonding (as outline in the rules), whichever is greater.

Please let me know if you have any questions.
Thanks!
[Quoted text hidden]

Barbara Pappas <barbara@cobraogc.com> Thu, Aug 6, 2015 at 3:10 PM
To: Rachel Medina <rachelmedina@utah.gov>

Rachel:

I have forwarded to my managers and hopefully will have an answer for you soon.

Thanks,

Barbara

From: Rachel Medina [mailto:rachelmedina@utah.gov]
Sent: Thursday, August 06, 2015 3:37 PM
To: Barbara Pappas <barbara@cobraogc.com>
Subject: Re: Plugged Wells

[Quoted text hidden]

Rachel Medina <rachelmedina@utah.gov> Fri, Aug 14, 2015 at 8:58 AM
To: Barbara Pappas <barbara@cobraogc.com>

Hi Barbara,

The Division received confirmation that the plugged wells need to be moved to Cobra. At this point we are waiting for shut in plans and plugging estimates on the following wells.

UTE TRIBAL 32-1A
UTE TRIBAL 32-3A
UTE TRIBAL 32-4A

Thanks!
[Quoted text hidden]

Charlie Gibson <charlie@cobraogc.com> Wed, Aug 19, 2015 at 8:40 AM
To: "rachelmedina@utah.gov" <rachelmedina@utah.gov>
Cc: Rory Edwards <rory@cobraogc.com>, Bobby Hess <bhess@cobraogc.com>, Kyle Gardner <kgardner@cobraogc.com>, Barbara Pappas <barbara@cobraogc.com>

Rachel,

We have studied the wells listed below and our estimate to plug the wells is $20,000/well. We also believe that the wells still have economic potential and plan on working on the wells by 10-1-2015 to attempt to re-establish production. Let me know if you have any questions.

Charlie Gibson

Operations Manager

Cobra Oil & Gas

(940)716-5100 (o)

(940)781-6260 (c)

From: Rachel Medina [mailto:rachelmedina@utah.gov]
Sent: Friday, August 14, 2015 9:59 AM
To: Barbara Pappas <barbara@cobraogc.com>
Subject: Re: Plugged Wells

Hi Barbara,

[Quoted text hidden]
[Quoted text hidden]

Rachel Medina <rachelmedina@utah.gov> Wed, Aug 19, 2015 at 4:46 PM
To: Dustin Doucet <dustindoucet@utah.gov>

What are you thoughts on the full cost bonding and the shut in plan?
[Quoted text hidden]

Dustin Doucet <dustindoucet@utah.gov> Wed, Aug 19, 2015 at 6:16 PM
To: Rachel Medina <rachelmedina@utah.gov>

Without more supporting evidence of their P&A cost estimate, I don't feel comfortable with the estimate provided. It appears several plugs may need to be drilled out to properly isolate formations with open perfs with cement as required by rule. I doubt this was taken into consideration in their estimates. Since they are proposing to work the wells over by October 1, 2015, I would be willing to accept the $30,000 depth bond per well to get these transferred and let them get the work done with the caveat that we will require more information on P&A costs and would require full cost bonds if found to be more than $30K per well if the work is not done by October 1, 2015.
[Quoted text hidden]
--
Dustin K. Doucet
Petroleum Engineer
Division of Oil, Gas and Mining
1594 West North Temple, Ste 1210
Salt Lake City, Utah 84116
801.538.5281 (ofc)
801.359.3940 (fax)

web: www.ogm.utah.gov

Rachel Medina <rachelmedina@utah.gov> Thu, Aug 20, 2015 at 9:09 AM
To: Charlie Gibson <charlie@cobraogc.com>
Cc: Rory Edwards <rory@cobraogc.com>, Bobby Hess <bhess@cobraogc.com>, Kyle Gardner <kgardner@cobraogc.com>, Barbara Pappas <barbara@cobraogc.com>

Hi Charlie,

The following is our Petroleum Engineer's review;

-Ute Tribal 32-1A, Ute Tribal 32-3A and Ute Triabl 32-4A are each required to have a $30,000.00 individual bond.
-Cobra's plan to put the wells on production by October 1, 2015 is accepted, however a condition has been placed that if the wells are not producing by October 1st the Division **will require** a new P&A estimate be

submitted and reviewed for full cost bonding.

Please submit bonding for each well, if Cobra needs the new bonding forms again please let me know. As soon as the bond is received we can begin to process the operator change.

Thanks!

[Quoted text hidden]

Rachel Medina <rachelmedina@utah.gov>

Utah Change of Operator from Whiting to Cobra

1 message

Charlie Gibson <charlie@cobraogc.com> Thu, Aug 13, 2015 at 2:17 PM
To: "rachelmedina@utah.gov" <rachelmedina@utah.gov>
Cc: Jeff Dillard <jeff@cobraogc.com>, Bob Osborne <bob@cobraogc.com>, Stephen Howard <Showard@basinoilandgas.com>, Caven Crosnoe <ccrosnoe@scglaw.com>, Rory Edwards <rory@cobraogc.com>, Phil Rugeley <phil@cobraogc.com>, Rick Haskin <rick@cobraogc.com>, Barbara Pappas <barbara@cobraogc.com>

Dear Rachel,

We have been informed by Whiting Oil and Gas Corporation that you have requested an email from Cobra Oil & Gas Corporation acknowledging that we have agreed to assume all plugging, abandoning and reclamation obligations for the wells described below. In accordance with the terms and conditions of the Purchase and Sale Agreement (Agreement) between Whiting Oil and Gas Corporation (Seller) and Cobra Oil & Gas Corporation, et al (Buyer), please be advised the Buyer assumed the obligation to plug and abandon all wells located on the Lands and reclaim all well sites located on the Lands regardless of when the obligations arose. Accordingly Cobra Oil and Gas Corporation, as Operator, assumes those obligations and liabilities associated with the wells described below:

CHIMNEY ROCK 32-11	32130S210E4304733445
UTE TRIBAL 32-11A	32140S200E4304733621
FLAT ROCK 13-32-14-20	32140S200E4304736992
FLAT ROCK 14-32-14-20	32140S200E4304736993

FLAT ROCK 15-32-14-20 32140S200E4304736994

UTE TRIBAL 8-25-14-19 30140S200E4304739053

Flat Rock 30-3A 4304730729

Ute Tribal 30-1 4304715764

Ute Tribal 30-4A 4304716520

Sincerely,

Charlie Gibson

Operations Manager

Cobra Oil & Gas

(940)716-5100 (o)

(940)781-6260 (c)

GARY R. HERBERT
Governor
SPENCER J. COX
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

March 29, 2017

CERTIFIED MAIL NO.: 7015 0640 0003 5276 0716

43 047 39741
Ute Tribal 5-32-14-20
32 14S 20E

Mr. Charlie Gibson
Cobra Oil & Gas Corp
PO Box 8206
Wichita Falls, TX 76307-8206

Subject: Shut-in and Temporarily Abandoned Wells Compliance Review (Fee or State Leases)

Dear Mr. Gibson:

As of January 2017, Cobra Oil & Gas Corp has eight (8) State Lease Wells (see attachment A) that are currently in non-compliance with the requirements for extended shut-in or temporarily abandoned (SI/TA) status.

Wells SI/TA beyond twelve (12) consecutive months requires filing a Sundry Notice (R649-3-36-1). Wells with five (5) years non-activity or non-productivity shall be plugged, unless the Division grants approval for extended shut-in time upon a showing of good cause by the operator (649-3-36-1.3.3). For extended SI/TA consideration the operator shall provide the Utah Division of Oil, Gas and Mining with the following:

1. Reasons for SI/TA of the well (R649-3-36-1.1).
2. The length of time the well is expected to be SI/TA (R649-3-36-1.2), and
3. An explanation and supporting data if necessary, for showing the well has integrity, meaning that the casing, cement, equipment condition, static fluid level, pressure, existence or absence of Underground Sources of Drinking Water and other factors do not make the well a risk to public health and safety or the environment (R649-3-36-1.3).

Please note that the Division's preferred method for showing well integrity is by MIT.

1594 West North Temple, Suite 1210, Salt Lake City, UT 84116
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

Submitting the information suggested below may help show well integrity and may help qualify your well for extended SI/TA. **Note: As of July 1, 2003, wells in violation of the SI/TA rule R649-3-36 may be subject to full cost bonding (R649-3-1-4.2, 4.3).**

1. Wellbore diagram, and
2. Copy of recent casing pressure test, and
3. Current pressures on the wellbore (tubing pressure, casing pressure, and casing/casing annuli pressure) showing wellbore has integrity, and
4. Fluid level in the wellbore, and
5. An explanation of how the submitted information proves integrity.

All Submittals should be sent via ePermit

If the required information is not received within 30 days of the date of this notice, further actions may be initiated. If you have any questions concerning this matter, please contact me at (801) 538-5281.

Sincerely,

Dustin K. Doucet
Petroleum Engineer

DKD/DD/js

Enclosure

cc: Compliance File
Well File
LaVonne Garrison, SITLA

N:\O&G Reviewed Docs\ChronFile\PetroleumEngineer\SITA

ATTACHMENT A

	Well Name	API	LEASE	Years.Months Inactive
1	UTE TRIBAL 32-6A	4304733337	ML-44317	1.3
2	UTE TRIBAL 32-8A	4304733557	ML-44317	1.3
3	UTE TRIBAL 32-12A	4304733558	ML-44317	1.3
4	UTE TRIBAL 32-7A	4304733618	ML-44317	1.3
5	UTE TRIBAL 32-9A	4304733619	ML-44317	1.3
6	UTE TRIBAL 32-10A	4304733620	ML-44317	1.3
7	UTE TRIBAL 10-2-15-20	4304735625	ML-46842	1.3
8	UTE TRIBAL 5-32-14-20	4304739741	ML-44317	1.3

FORM 9

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

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: ML-44317

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: UTE TRIBAL 5-32-14-20

2. NAME OF OPERATOR: COBRA OIL & GAS CORP

9. API NUMBER: 43047397410000

3. ADDRESS OF OPERATOR: PO BOX 8206 , Wichita Falls, TX, 76307

PHONE NUMBER: 940 716-5100 Ext

9. FIELD and POOL or WILDCAT: FLAT ROCK

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0809 FNL 1529 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 32 Township: 14.0S Range: 20.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 5/1/2017	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ SPUD REPORT Date of Spud:	✓ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

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

Cobra Oil & Gas Corporation hereby gives notice of intent to return to production concerning the Ute Tribal 5-32-14-20 well.

Accepted by the Utah Division of Oil, Gas and Mining

Date: May 15, 2017

By: Dark K Quist

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Barbara Pappas	940 716-5100	DRLG & REG ADMIN
SIGNATURE N/A		**DATE** 5/5/2017

RECEIVED: May. 05, 2017

State of Utah

SPENCER J. COX
Governor

DEIDRE M. HENDERSON
Lieutenant Governor

Department of Natural Resources
Division of Oil, Gas and Mining

JOEL FERRY
Executive Director

JOHN R. BAZA
Division Director

November 3rd, 2023

Cobra Oil & Gas Corporation
Barbara Pappas
PO Box 8206
Wichita Falls, TX 76307

Re: Extended Shut-in and Temporary Abandoned Well Requirements for Fee or State Leases and SWD's

Dear Barbara Pappas,

As of November 2023, Cobra Oil & Gas Corporation has 1 new well that is currently in non-compliance with the requirements for extended shut-in or temporarily abandoned (SI/TA) status.

Wells SI/TA beyond twelve (12) consecutive months requires filing a Sundry Notice (R649-3-36-1). Wells with five (5) years non-activity or non-productivity shall be plugged, unless the Division grants approval for extended shut-in time upon a showing of good cause by the operator (649-3-36-1.3.3). For extended SI/TA consideration the operator shall provide the Utah Division of Oil, Gas & Mining with the following:

1. Reasons for SI/TA of the well (R649-3-36-1.1).

2. The length of time the well is expected to be SI/TA (R649-3-36-1.2), and

3. An explanation and supporting data if necessary, for showing the well has integrity, meaning that the casing, cement, equipment condition, static fluid level, pressure, existence or absence of Underground Sources of Drinking Water and other factors do not make the well a risk to public health and safety or the environment (R649-3-36-1.3).

Please note that the Divisions preferred method for showing well integrity is by MIT.

Submitting the information suggested below may help show well integrity and may help qualify your well for extended SI/TA. Note: As of July 1, 2003, wells in violation of the SI/TA rule R649-3-36 will be subject to full cost bonding (R649-3-1-4.2, 4.3).

1. Wellbore diagram, and
2. Copy of recent casing pressure test, and
3. Current pressures on the wellbore (tubing pressure, casing pressure, and casing/casing annuli pressure) showing wellbore has integrity, and
4. Fluid level in the wellbore, and
5. An explanation of how the submitted information proves integrity.

If the required information is not received within 30 days of the date of this notice, further actions may be initiated. If you have any questions concerning this matter, please contact me at (801) 538-5290 or mcrocker@utah.gov.

Sincerely,

Megan Crocker

Digitally signed by Megan Crocker
Date: 2023.11.03 13:24:27 -06'00'

Megan Crocker
Geologist

cc: Compliance File
Well File
Dustin Doucet

ATTACHMENT A

Well Name	API	Lease Type	Months Inactive
Ute Tribal 5-32-14-20	4304739741	State	13

FORM 9

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

5.LEASE DESIGNATION AND SERIAL NUMBER: ML-44317

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.

6. IF TRIBAL, ALLOTTEE OR TRIBE NAME: UTE

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: Ute Tribal 5-32-14-20

2. NAME OF OPERATOR: Cobra Oil & Gas Corp

9. API NUMBER: 43047397410000

3. ADDRESS OF OPERATOR: PO Box 8206 , Wichita Falls, TX, 76307-8206

PHONE NUMBER: 940-716-5100

9. FIELD and POOL or WILDCAT: FLAT ROCK

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 809 FNL 1529 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 32 Township: 14S Range: 20E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11.

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

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
✓ SUBSEQUENT REPORT Date of Work Completion: 12/1/2023	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DRILLING REPORT Report Date:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	✓ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

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

Returned well to production on December 1, 2023. 12/01/2023: TP 500 psi, CP 500 psi, made 4 MCF gas in 24 hrs, 0 BO, 0 BW. Unloaded well. 12/02/2023: TP 400 psi, CP 400 psi, made 127 MCF gas in 24 hrs, 0 BO, 0 BW. 12/03/2023: TP 100 psi, CP 100 psi, made 87 MCF gas in 24 hrs, 0 BO, 0 BW.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
(This is not an approval)
December 08, 2023

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Barbara Pappas	940 716-5100	DRLG & REG ADMIN
SIGNATURE		**DATE**
N/A		12/4/2023

RECEIVED: Dec. 04, 2023