

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT**

SUBMIT IN TRIPPLICATE  
(Other instruction reverse side)

Form approved,  
Budget Bureau No. 1004-0136  
Expires: December 31, 1991

**APPLICATION FOR PERMIT TO DRILL OR DEEPEN**

**1A. TYPE OF WORK**  
 DRILL                       DEEPEN

**B. TYPE OF WELL**  
 OIL WELL       GAS WELL       OTHER       SINGLE ZONE       MULTIPLE ZONE

**2. NAME OF OPERATOR**  
 Chevron U.S.A. Production Co.

**3. ADDRESS AND TELEPHONE NO.**  
 100 Chevron Rd., Rangely, CO 81648      (303) 675-3700

**4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)**  
 At surface 2056' FNL & 663' FEL (SE NE) Sec. 20  
 At proposed prod. zone      As above

**14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\***  
 6.9 miles northeast of Ouray, UT

**15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any)**      663'

**16. NO. OF ACRES IN LEASE**      1237.99

**17. NO. OF ACRES ASSIGNED TO THIS WELL**      40

**18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.**      1311'

**19. PROPOSED DEPTH**      GRRV  
 ±5300' MD & TVD

**20. ROTARY OR CABLE TOOLS**  
 Rotary

**21. ELEVATIONS (Show whether DP, RT, GR, etc.)**  
 GR 4683'

**22. APPROX. DATE WORK WILL START\***  
 August 1, 1992

**5. LEASE DESIGNATION AND SERIAL NO.**  
 U-0140746

**6. IF INDIAN, ALLOTTEE OR TRIBE NAME**  
 Ute-Ouray

**7. UNIT AGREEMENT NAME**  
 Gypsum Hills Unit

**8. FARM OR LEASE NAME WELL NO.**  
 Gypsum Hills #9

**9. AREA WELL NO.**

**10. FIELD AND POOL, OR WELSPAC (D/C)**  
 Gypsum Hills, Green River

**11. SEC., T., R., N., OR BLK. AND SUBST. OR AREA**  
 20, 8S, 21E

**12. COUNTY OR PARISH**      Uintah      **13. STATE**      UT

**23. PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	K-55 8 5/8"	24#	± 500'	±300 SXS
7 7/8"	K-55 5 1/2"	17#	±5300'	To be determined by logs

Attachments: Certified Plat  
 Drilling Program  
 Chevron Class III BOPE  
 Geologic Program  
 Multipoint Surface Use Plan

Completion Procedure to be submitted by Sundry Notice.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout prevention program, if any.

**24. SIGNED** *J. D. Howard*      **TITLE** Drilling Technician      **APPROVED BY THE STATE**  
 OF UTAH DIVISION OF OIL, GAS, AND MINING      **DATE** 6-22-92

(This space for Federal or State office use)

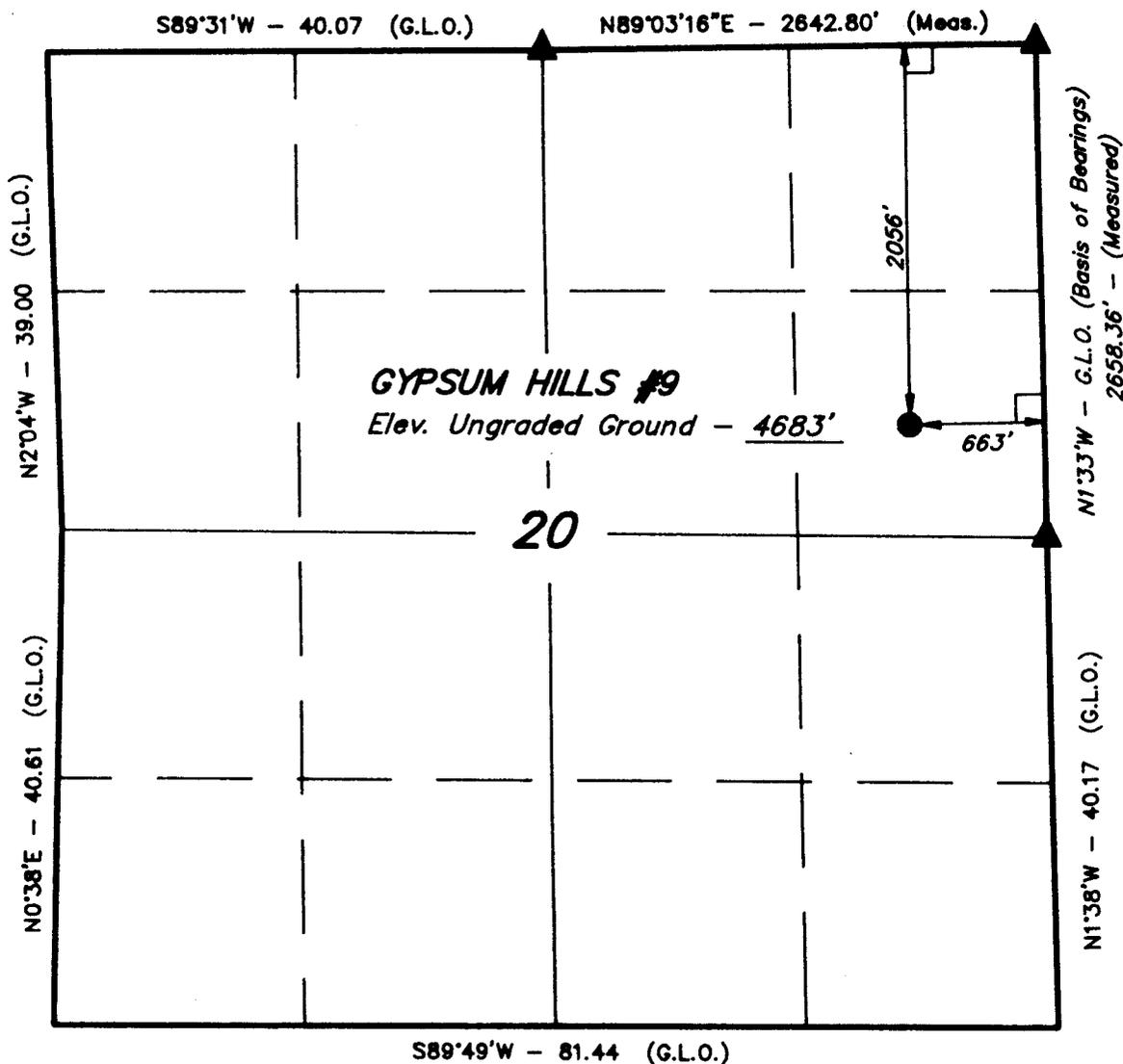
**PERMIT NO.** 43-047-30304      **APPROVAL DATE** DATE: 6-22-92

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to a drilling permit.  
**CONDITIONS OF APPROVAL, IF ANY:** WELL SPACING: 649-2-3

T8S, R21E, S.L.B.&M.

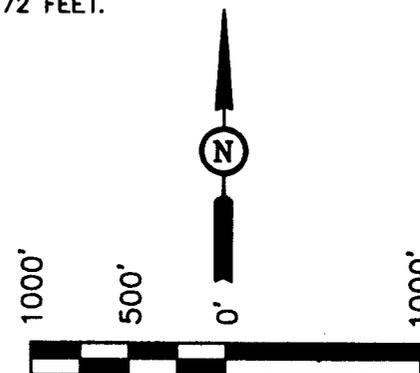
CHEVRON U.S.A. INC.

Well location, GYPSUM HILLS #9, located as shown in the SE 1/4 NE 1/4 of Section 20, T8S, R21E, S.L.B.&M. Uintah County, Utah.



BASIS OF ELEVATION

BENCH MARK #45 EAM LOCATED IN THE NORTH 1/2 OF SECTION 5, T8S, R21E, S.L.B.&M. TAKEN FROM THE BRENNAN BASIN QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS STAMPED AS BEING 4688.72 FEET.



SCALE  
CERTIFICATE

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. 5709  
STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING  
P. O. BOX 1758 - 85 SOUTH - 200 EAST  
VERNAL, UTAH - 84078

SCALE 1" = 1000'	DATE 6-27-91
PARTY D.A. D.S. R.E.H.	REFERENCES G.L.O. PLAT
WEATHER HOT	FILE CHEVRON U.S.A. INC.

▲ = SECTION CORNERS LOCATED. (Broom Caps)

# Hang in There!!!

## The Fax is on it s way!!

### PANAFAX TRANSMISSION

Chevron U.S.A. Inc.  
100 Chevron Road  
Rangely, CO 81648

(303) 675-3700 - Confirm  
(303) 675-3800 - Panafax

CTN NUMBERS ARE THE SAME

SENT TO: UTAH Board of OIL, GAS & MINING / S.L.C. UTAH

ATTN: FRANK MATTHEWS

FAX #: (801) 359-3940

FROM: CHEVRON USA / RANGELY CO

J. D. HOWARD

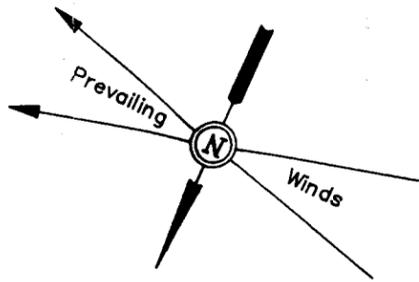
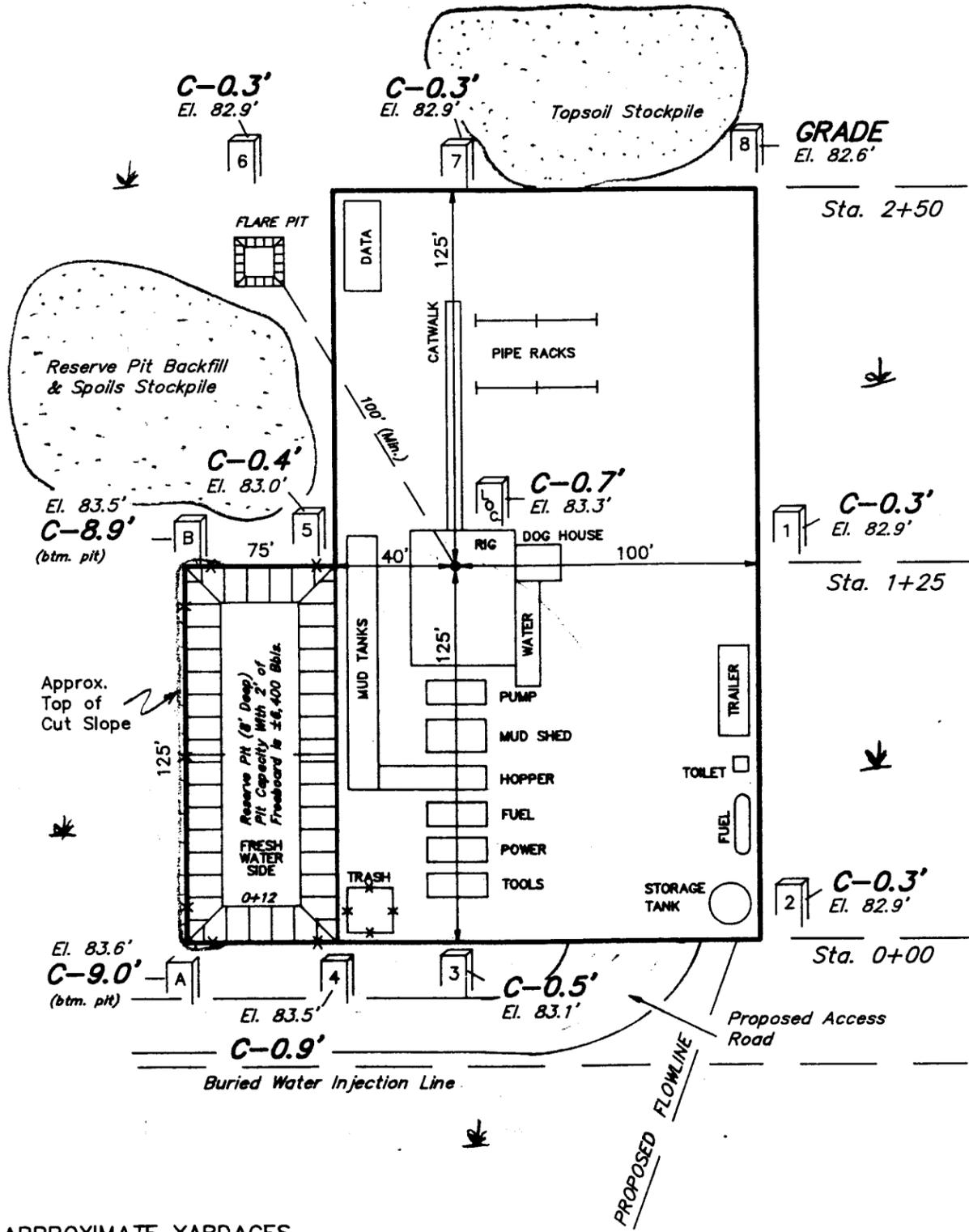
Phone: (303) 675-3791

TOTAL NUMBER OF PAGES BEING SENT (INCLUDING THIS ONE) 2

NOTE:



CHEVRON U.S.A., INC.  
 LOCATION LAYOUT FOR  
 GYPSUM HILLS #9  
 SECTION 20, T8S, R21E, S.L.B.&M.

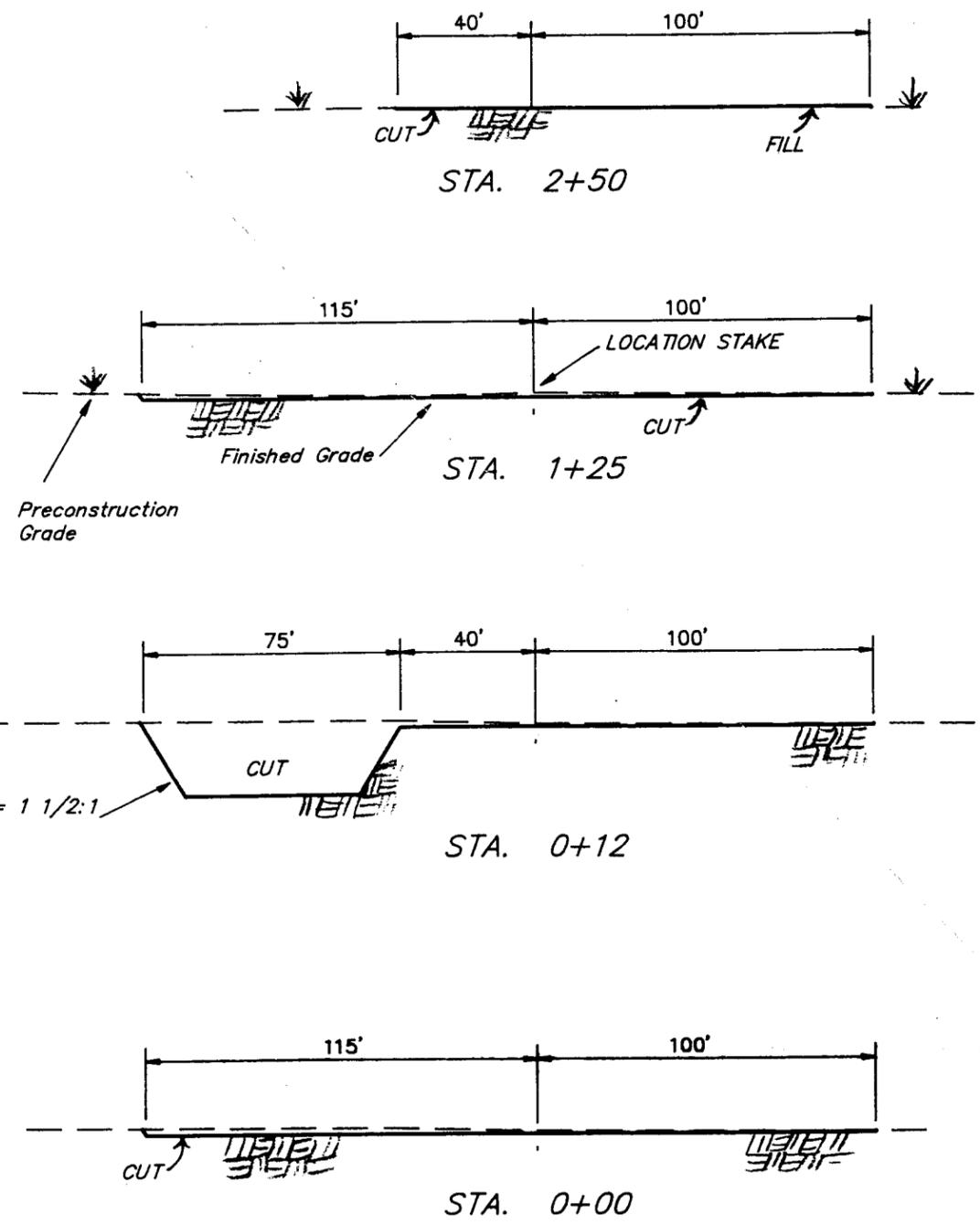


SCALE: 1" = 50'  
 DATE: 6-27-91  
 Drawn By: R.E.H.

X-Section Scale  
 1" = 20'

TYP. LOCATION LAYOUT

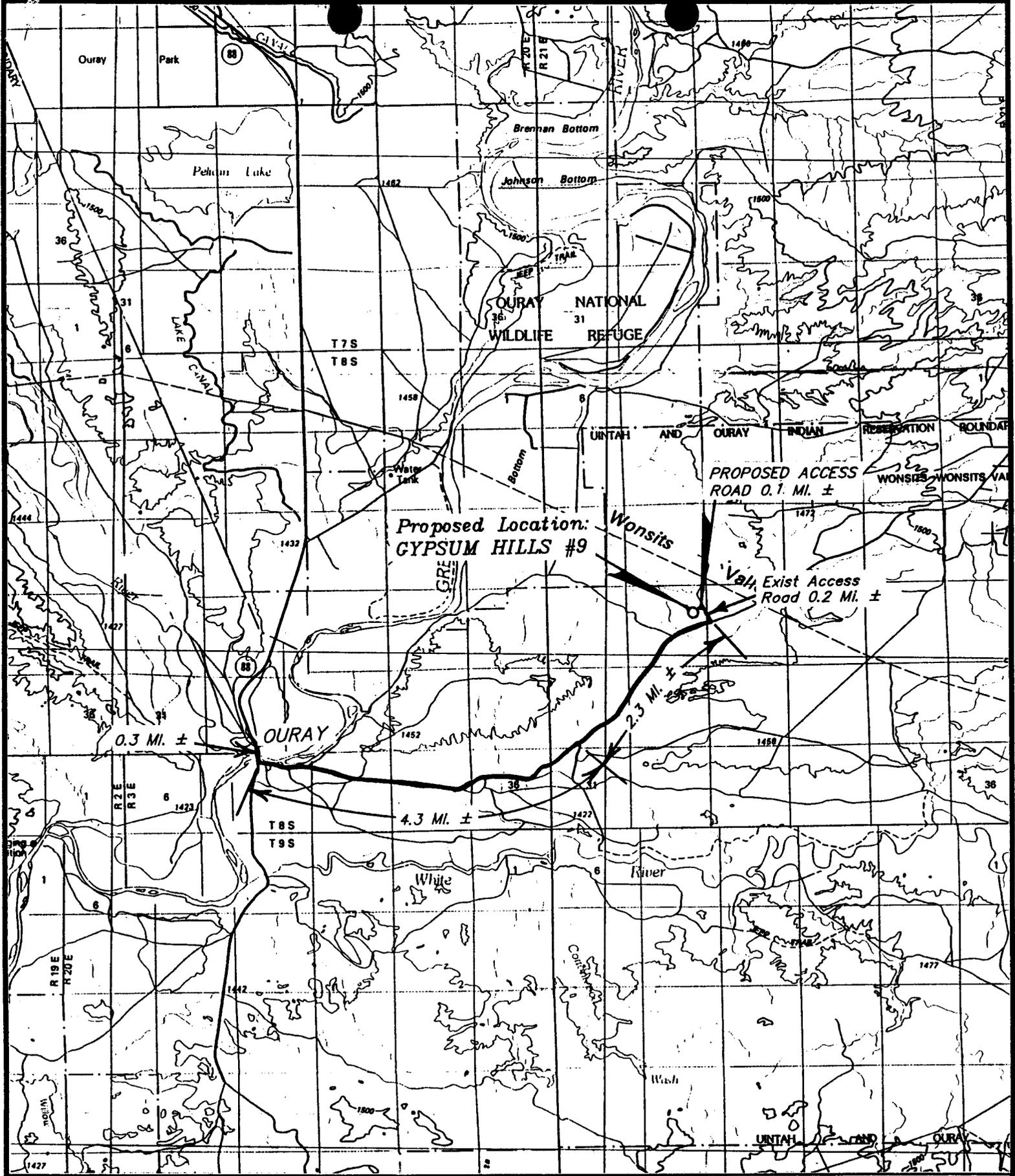
TYP. CROSS SECTIONS



APPROXIMATE YARDAGES

(12") Topsoil Stripping	= 1,650 Cu. Yds.	EXCESS MATERIAL AFTER 5% COMPACTION	= 2,910 Cu. Yds.
Remaining Location	= 2,050 Cu. Yds.	Topsoil & Pit Backfill (1/2 Pit Vol.)	= 2,850 Cu. Yds.
<b>TOTAL CUT</b>	<b>= 3,700 CU.YDS.</b>	EXCESS UNBALANCE (After Rehabilitation)	= 60 Cu. Yds.
<b>FILL</b>	<b>= 750 CU.YDS.</b>		

Elev. Ungraded Ground at Location Stake = **4683.3'**  
 Elev. Graded Ground at Location Stake = **4282.6'**



Proposed Location:  
GYPSUM HILLS #9

PROPOSED ACCESS  
ROAD 0.1 Mi. ±

Exist Access  
Road 0.2 Mi. ±

0.3 Mi. ±

4.3 Mi. ±

2.3 Mi. ±

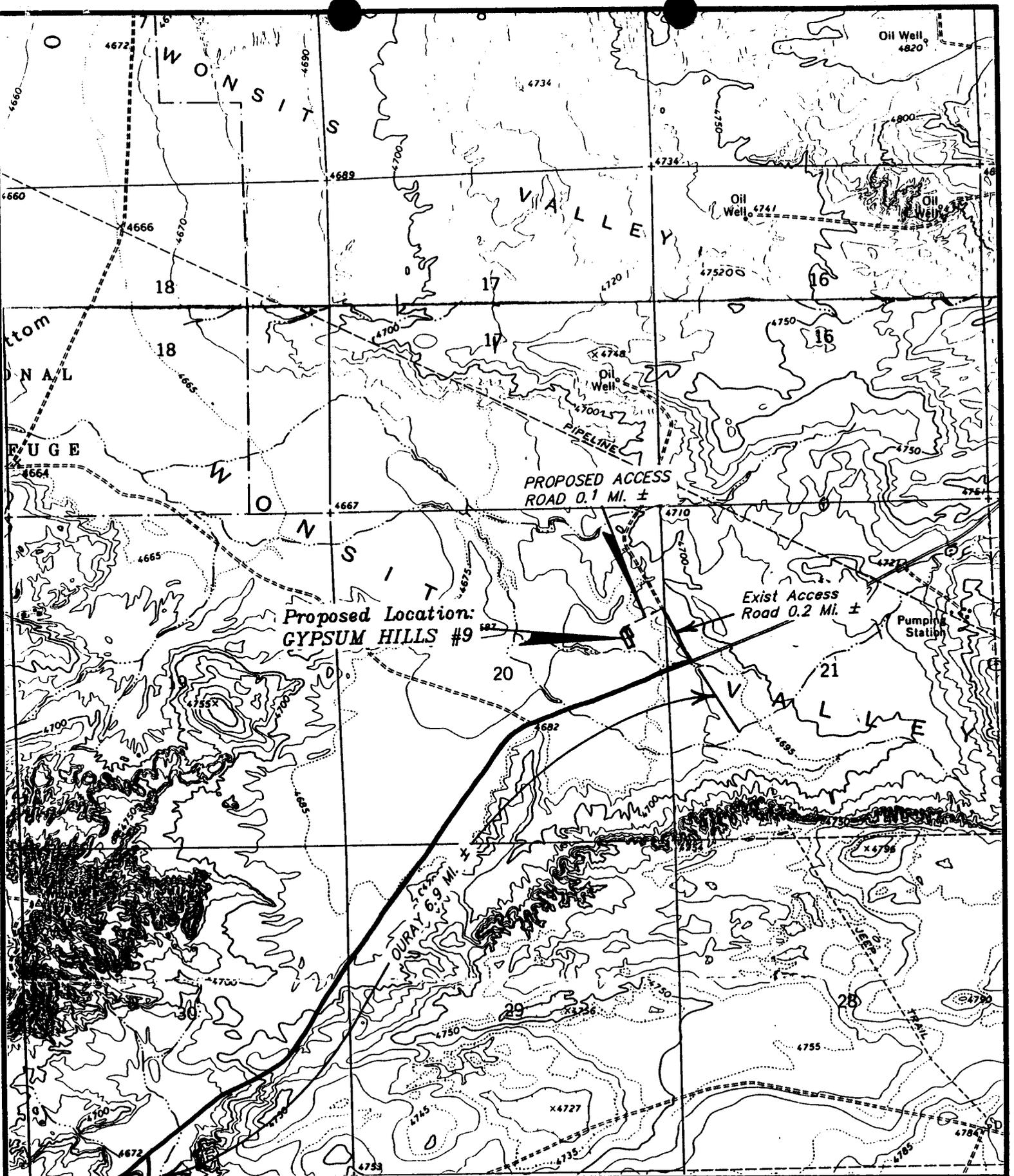
TOPOGRAPHIC  
MAP "A"

DATE 6-26-91 R.E.H.



**CHEVRON U.S.A. INC.**

GYPSUM HILLS #9  
SECTION 20, T8S, R21E, S.L.B.&M.



TOPOGRAPHIC  
 MAP "B"  
 SCALE: 1" = 2000'  
 DATE 6-26-91 R.E.H.



**CHEVRON U.S.A. INC.**  
 GYPSUM HILLS #9  
 SECTION 20, T8S, R21E, S.L.B.&M.

**GYPSUM HILLS #9  
DRILLING PROGRAM  
API#  
AFE#**

**SURFACE CSG WILL BE SET PRIOR TO MOVING ON DRILLING RIG. CSG DEPTH WILL BE +/- 500' USING 8 5/8" 24#, K-55, STC CSG. THE WELLHEAD EQPT. WILL BE FROM STOCK, CONTACT DRLG SUPT. @ (303-675-3730), POSSIBLE SHALLOW OIL SHOWS F/ 2,500' - TD.**

**(NOTIFY ED FORSEMAN THE BLM 24 HRS PRIOR TO SPUD @ 801-789-7077 AND CAROL KUBLY W/ UTAH OIL & GAS @ 801-789-1388.**

**8 5/8" CSG JOB**

**24#, K-55 STC CSG AS FOLLOWS:  
FS(SUPER SEAL/NON DIFFERENTIAL), 1 JT 8 5/8"  
CSG, FC, "X" JTS 8 5/8" CSG.**

**CENTRALIZERS: 1 - 5' ABOVE FS & FC, & 1 EVERY 4TH JT TO SURF.**

**CIRC 2 CSG VOLUMES & CMT 8 5/8" CSG TO SURFACE AS FOLLOWS:  
CLASS H W/ 2% CaCl2 @ 16.4 PPG  
W/ 50% EXCESS.**

**NOTE: HAVE SAFETY SWAGE ON FLOOR & NOTE IN TOUR REPORT  
USE TOP & BTM PLUG  
BUMP PLUG W/ 300-500 PSI OVER FINAL PUMP PRESS.  
NOTIFY THE STATE 24 HOURS PRIOR TO CMT & TESTING  
BOPE.**

**MAKE ROUGH CUT ON CSG & CENTER, MAKE FINAL CUT & INSTALL 11" X  
8 5/8" - 3M CSG HEAD.**

- 1) MIRU DRILLING RIG, N/U & TEST CHEVRON CLASS III BOPE (250 LOW/  
3000 HIGH), TEST HYDRIL TO 1500 PSI.**
- 2) RIH W/ 7 7/8" BIT TO TOP OF FC & TEST CSG TO 1500 PSI FOR 30  
MIN, DRILL OUT PLUGS, FC, & +/- 20' CMT & RETEST SAME AS ABOVE.  
DRILL OUT FS PLUS 10' NEW FORMATION & PERFORM A FORMATION  
INTEGRITY TEST TO A 10ppg EMW.  
BHA:BIT, BIT SUB W/ FLOAT, 18-6 3/4" DC, X/O  
(NOTE: STAB @ 60')**
- 3) DRILL 7 7/8" HOLE TO +/- 5,300' (USE FW/GYP MUD TO 2500' &  
FWG/DISPERSED MUD F/ 2500' - 5300' AS HOLE PERMITS, DRILL AS  
CLOSE TO BALANCED CONDITIONS AS POSSIBLE TO REDUCE THE CHANCE  
OF FORMATION DAMAGE).**

**NOTE: POSSIBLE LOSS CIRC @ +/- 4,500'  
SHORT TRIP AS NEEDED  
SURVEY EVERY 300-500'**

- 4) CIRC & COND HOLE FOR LOGS., DROP SURVEY, POOH/SLM.**

- 5) R/U & RUN LOGS AS PER GEOLOGIC PROGRAM (CONTACT BOB RECTOR W/ GEOLOGY BEFORE RUNNING LOGS @ 930-3246, A DECISION WILL BE MADE @ THIS TIME TO RUN CSG OR P&A WELL).
- 6) TIH & CIRC & COND HOLE FOR 5 1/2" CASING.
- 7) RUN 5 1/2", K-55, 17# LTC CSG AS FOLLOWS:  
FS, 2 JTS 5 1/2" CSG, FC, "X"JTS 5 1/2" CSG.  
CENTRALIZERS: 1 - 5' ABOVE FS & FC & 1 B/W FS & FC, THEN  
1 EVERY JT TO 4,900' & 1 EVERY OTHER  
JT F/ 4,800' - 80' BELOW SURFACE.
- 8) CIRC 2 CSG VOLUMES & CMT 5 1/2" AS DETAILED IN CMT PROGRAM.  
NOTE: NOTIFY THE STATE 24 HOURS PRIOR TO CMT JOB
- 9) DROP SLIPS, MAKE ROUGH CUT, N/D BOPE, MAKE FINAL CUT & INSTALL TBG HEAD BONNET.
- 10) R/D & MOL.

COMPLETION TO BE DONE BY WO/COMPLETION RIG.

COMPLETE CONTRACTOR EVALUATION FORM & SEND  
INTO OFFICE W/ RIG MAIL.

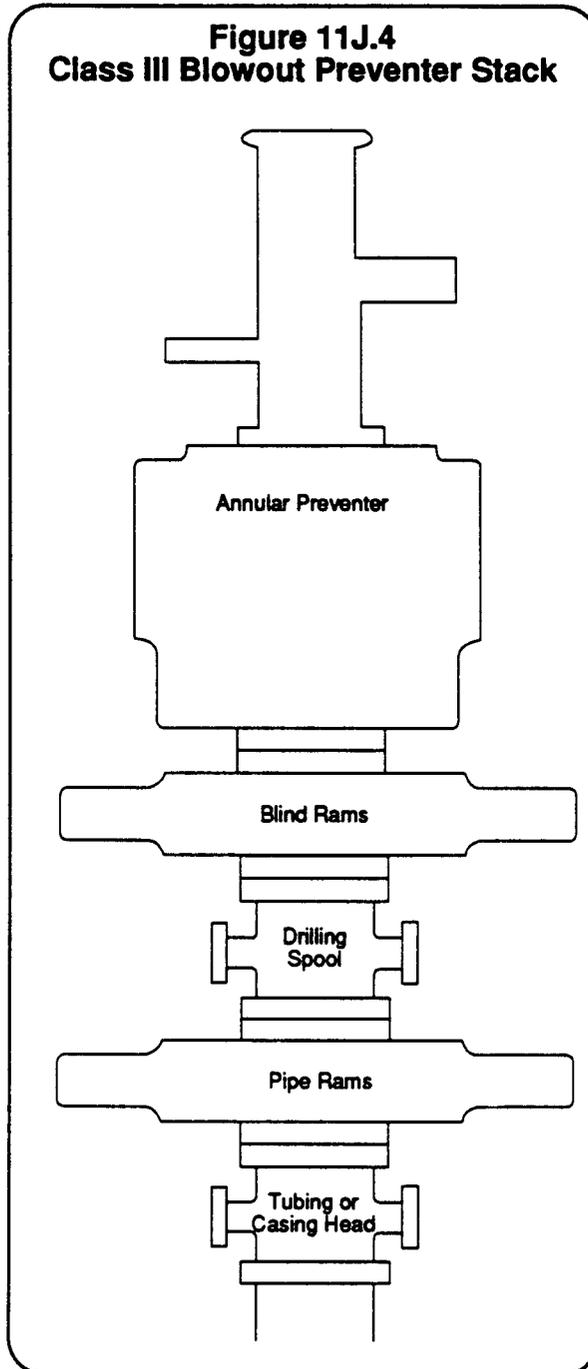
D.H. HUDSPETH  
#303-930-3926  
19-MARCH-92

CHEVRON DRILLING REFERENCE SERIES  
VOLUME ELEVEN  
WELL CONTROL AND BLOWOUT PREVENTION

E. CLASS III BLOWOUT PREVENTER STACK:

The Class III preventer stack is designed for drilling or workover operations. It is composed of a single hydraulically operated annular preventer on top, then a blind ram preventer, a drilling spool, and a single pipe ram preventer on bottom. The choke and kill lines are installed onto the drilling spool and must have a minimum internal diameter of 2". All side outlets on the preventers or drilling spool must be flanged, studded, or clamped. An emergency kill line may be installed on the wellhead. A double ram preventer should only be used when space limitations make it necessary to remove the drilling spool. In these instances, the choke manifold should be connected to a flanged outlet between the preventer rams only. In this hookup, the pipe rams are considered master rams only, and cannot be used to routinely circulate out a kick. The Class III blowout preventer stack is shown to the right in Figure 11J.4.

**Figure 11J.4**  
**Class III Blowout Preventer Stack**

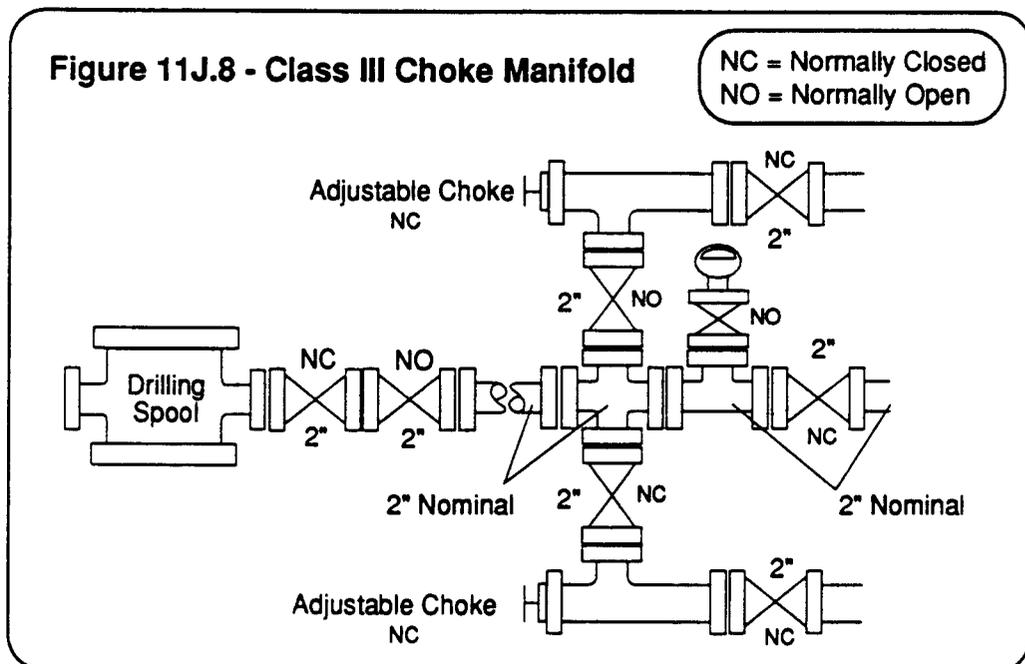


CHEVRON DRILLING REFERENCE SERIES  
 VOLUME ELEVEN  
 WELL CONTROL AND BLOWOUT PREVENTION

**D. CLASS III CHOKE MANIFOLD**

The Class III choke manifold is suitable for Class III workovers and drilling operations. The Standard Class III choke manifold is shown in Figure 11J.8 below. Specific design features of the Class III manifold include:

1. The manifold is attached to a drilling spool or the top ram preventer side outlet.
2. The minimum internal diameter is 2" (nominal) for outlets, flanges, valves and lines.
3. Includes two steel gate valves in the choke line at the drilling spool outlet. The inside choke line valve may be remotely controlled (HCR).
4. Includes two manually adjustable chokes which are installed on both side of the manifold cross. Steel isolation gate valves are installed between both chokes and the cross, and also downstream of both chokes.
5. Includes a bleed line which runs straight through the cross and is isolated by a steel gate valve.
6. Includes a valve isolated pressure gauge suitable for drilling service which can display the casing pressure within view of the choke operator.
7. Returns through the choke manifold must be divertible through a mud-gas separator and then be routed to either the shale shaker or the reserve pit through a buffer tank or manifold arrangement.
8. If the choke manifold is remote from the wellhead, a third master valve should be installed immediately upstream of the manifold cross.

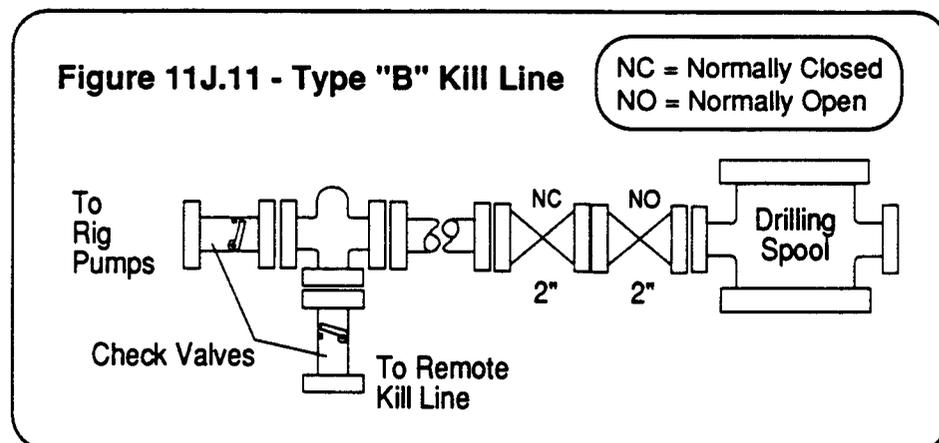


CHEVRON DRILLING REFERENCE SERIES  
VOLUME ELEVEN  
WELL CONTROL AND BLOWOUT PREVENTION

D. TYPE "B" KILL LINE — CLASS III, IV, AND V WELLS

The type B kill line described below in Figure 11J.11 is the minimum recommended hookup for installation on all Class III, Class IV and Class V wells. Specific design features of the type B kill line include:

1. The preferred kill line connection to the well is at the drilling spool, however, a preventer side outlet may be used when space restrictions exclude the use of a drilling spool. In all cases, the kill line must be installed below the uppermost blind rams so the well can be pumped into with no pipe in the hole.
2. The arrangement includes two - 2" (nominal) gate valves installed at the drilling spool and an upstream fluid cross. The outside valve may be hydraulically remote controlled.
3. Two pump-in lines should be attached to the fluid cross. The **primary kill line** should be routed to the rig standpipe where it can be manifolded to the rig pumps. The **remote kill line** should be run to a safe location away from the rig or to the rig cementing unit. The remote kill line should have a loose end connection for rigging-up a high pressure pumping unit.
4. Both the primary kill line and the remote kill line must include a 2" check valve which is in working condition while drilling. If a check valve is crippled for testing purposes, the flapper or ball must be re-installed and tested before drilling resumes.
5. The primary kill line must include a pressure gauge which can display the pump-in pressure on the rig floor.
6. Any lines which are installed at the wellhead are designated as "**emergency kill lines**" and should only be used if the primary and remote kill lines are inoperable.



## DRILLING PROGRAM ATTACHMENT

### GENERAL REMARKS

1. Applicable Federal and State Regulations will be adhered to during the drilling of this well.
2. The drilling rig is to be level and the kelly centered over the hole before drilling operations commence. Check periodically during the drilling of the well to insure the rig stays level.
3. Prior to spud insure all toolpushers, drillers and crews are thoroughly familiar with and understand the Chevron procedure for handling well kicks.

In H<sub>2</sub>S environments Chevron's contingency plan for your location is to be read, understood and adhered to. All personnel are to be thoroughly familiar with the use of air packs, the air supply system, locations of air packs and what to do in the event of sour gas to surface.

4. Test BOPE before drilling out and every seven days thereafter. Perform low pressure test (200 psi) and high pressure test. High pressure test should be 70% of BOPE working pressure or 70% of burst of last casing string, whichever is less. Record BOP tests on Tour Reports. Notify applicable Federal and State Regulatory Agencies 24 hours in advance of BOPE tests and record notification and names on Tour Reports.
5. Do not reuse ring gaskets. Replace with new Rx or Bx ring gaskets.
6. Separate full opening safety valves and inside BOP's are required for each size drill pipe in use. Test weekly with BOPE.
7. Run full open valve below kelly that can be run in the hole if necessary. Do not use this valve as a mud saver sub.
8. BOP controls are to remain in the open position during drilling operations.
9. Hold pit drills for each crew at least once every seven days and record on Tour Reports.
10. On trips fill the annulus before hydrostatic pressure drops 75 psi or every 5 stds of drill pipe, whichever is first. Use trip tanks to measure hole fill-up and monitor at all times.
11. Use drill pipe floats at all times unless your supervisor instructs otherwise.
12. Have wear ring installed in wellhead before tripping or rotating. Remember to remove wear ring before running casing or when testing BOPE.

13. Casing rams are to be installed and bonnets tested on last trip out before running casing.
14. Run pilot and thickening time tests with rig mixing water for all cement slurries prior to cementing operations.
15. Casing should be tested to 1,500 psi or 0.2 psi/ft., whichever is greater, prior to drilling out and recorded on Tour Reports. Discuss the test pressure with your supervisor and reference DM-49 before testing.
16. Drill out slick beneath each casing string. Drill deep enough to bury stabilization to be picked up.
17. Do not drill with hardbanded pipe inside of casing.
18. Do not run full gauge stabilizers. Run stabilizers 1/16" to 1/8" undergauge.
19. When necessary to work pipe, keep pipe moving up and down. Rotating alone is not considered sufficient.
20. Install and test full lubricator on all logging runs unless instructed otherwise by supervisor.
21. Fully describe damaged or lost equipment on Tour Reports.

DR# Form

DENVER DIVISION  
DEVELOPMENT WELL

GEOLOGICAL INFORMATION:

Field/Area: Gypsum Hills Well Name: Gypsum Hills #9  
Surface Locations: 2056' FNL 1666' FEL Sec 20-T8S-R21E  
State: Utah County: Uintah  
Est. Surface Elevation: 4683' T.D.: 5300 TVD: 5300  
Type of Completion: Rod Pump Oil Producer

Objective Formations	Expected Depth TVD	Target Radius	Expected BII Pressure	Type & Amount of Production
<u>Grn Rvr - G1 Lime</u>	<u>4177 ~ 5180</u>		<u>1200 psi</u>	<u>50 BOPD</u>

Anticipated Drillstem Tests \_\_\_\_\_, Cores \_\_\_\_\_, \_\_\_\_\_

Wireline Logging Program and Depth to be Run: DIL/GR, LPT/CNL, Microlog  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Logging Company: Schlumberger Estimated Cost: \$15,000 max

Mud Logging Unit: \_\_\_\_\_ Starting @ base of surf csg ft.

Primary and uppermost expected hydrocarbon zones or corrosive water to be protected with cement: amt to surf  
\_\_\_\_\_

Offset Well Data:

Well Name & Number	Operator	Location
<u>1) Costas 3-21-1D</u>	<u>CUSA</u>	<u>SWNW S21-T8S-R21E</u>
<u>2) GH 8-I</u>	<u>CUSA</u>	<u>SWNE S20-T8S-R21E</u>
<u>3) Costas 2-20-3B</u>	<u>CUSA</u>	<u>NESE S20-T8S-R21E</u>
<u>4) GH 3</u>	<u>CUSA</u>	<u>NE NE S20-T8S-R21E</u>



Artificial Lift Requirements (Rod pump, sub. pump, gas lift, etc.):  
rod pump, rods, pumping unit, line heater, ~~stock~~ production tank

Facilities & operations are providing cost estimates  
for production & surface equipment, including tbg.

CHEVRON U.S.A. PRODUCTION CO.

GYPSUM HILLS UNIT 9

SEC. 20, T8S, R21E

UNITAH COUNTY UTAH

MULTIPOINT SURFACE USE PLAN

1. EXISTING ROADS:

A. See Topo Map A. There are no plans to change, alter or improve upon any existing state or county road.

B. See Topo Map A. Travel west from Vernal approximately 15 miles on U S highway 40. Turn south on Utah State 88 and proceed approximately 16 miles to Ouray Utah. Turn left and proceed north east on existing lease road +/- 6.9 miles. Turn north on existing lease road .2 miles to access road to location.

2. PLANNED ACCESS ROAD

See Topo Map A and B.

The access road and location site are on BLM lands. The portion of the access road requiring upgrading is a span approximately .1 of a mile.

A. Width: Maximum width 30', with an 18' travel area.

B. Maximum Grade: No greater than 3%.

C. Turnouts: None, no blind corners.

D. Drainage design: Road to be placed and constructed so that minimal drainage alterations will be made. Water will be diverted around the well pad as necessary.

E. Major cuts and fills: None.

F. Surfacing Materials: Gravel as necessary.

G. Other: No gates, cattleguards or fence cuts.

3. LOCATION OF EXISTING WELLS

See Map B. There are no existing wells within the well site section.

4. LOCATION OF EXISTING OR PROPOSED FACILITIES

A. See Map B.

B. Disturbed areas no longer needed for operations will be graded back to as near original contour as possible. Drainage channels will be returned to original contour and the areas will be reseeded as prescribed by the BLM.

C. A blooie pit 8' X 10' X 5' deep will be constructed 150' diagonally from the wellbore. A line will be placed on the surface from the wellbore to the burn pit. the pit will be fenced on four sides to protect livestock.

#### 5. LOCATION AND TYPE OF WATER SUPPLY

A. Water for drilling operations will be trucked to the location from a source located in the (SE NW) Sec. 6, T8S, R21E.

#### 6. SOURCE OF CONSTRUCTION MATERIAL

A. All gravel, cement, etc., required for the access road and location will come commercially from the Vernal, Utah area.

#### 7. METHODS FOR HANDLING WASTE DISPOSAL

A. Cuttings will be settled out in the reserve pit. The reserve pit will be lined if soil conditions dictate. It will be fenced on three sides with a woven wire stock fencing. The fourth side of the reserve pit will be fenced after the drilling rig moves off location.

B. Drilling fluids will be retained in the reserve tanks utilizing maximum recirculation during drilling operations. Following drilling operations, the liquid waste will be evaporated or hauled to an approved disposal site, and the pit will be backfilled and returned to the natural contour.

C. In the event fluids are produced, any oil will be retained in tanks until sold. Produced water will go to Battery B to be reinjected into the waterflood system.

D. Sewage will be temporarily held in a insulated fiber glass tank, located in the vicinity of the trailers on the location. The sewage will be transported and disposed of by a licensed disposal company.

E. Trash will be contained in a portable metal container and hauled to an approved disposal site.

#### 8. ANCILLARY FACILITIES

There is no anticipated need for ancillary facilities with the exception of the three trailers on the drilling location.

#### 9. WELLSITE LAYOUT

A. See Location Layout.

B. Burn pit will not be lined.

C. Access to the well pad will be as shown on Topo Map B.

10. PLANS FOR RESTORATION OF SURFACE

- A. All surface areas not required for producing operations will be returned to as near original contour as possible to keep possible erosion to a minimum. Any rock encountered in excavation will be disposed of beneath backfill to return the surface to its present condition and provide soil for seed growth.
- B. The topsoil will be evenly distributed over the disturbed areas. Reseeding will be performed as directed by the BLM.
- C. Pits and any area that could present a hazard to wildlife or livestock will be fenced until backfilled.
- D. Any oil accumulation on the pit will be removed or overhead flagging installed as dictated by existing conditions.
- E. The well will be completed during 1992. Rehabilitation will commence following completion of the well. If the well is to be abandoned, all disturbed areas will be returned to the natural contour as much as possible.

11. SURFACE OWNERSHIP

- A. The access road and well location are on BLM land.

12. OTHER INFORMATION

- A. The well is located in hilly and sandy terrain. Vegetation consists of small sagebrush and natural grasses around the location. The soil is a poorly developed, semi-arid, thin topsoil layer over the Uintah Formation.
- B. Surface use activities other than the oil well facilities consists of livestock grazing.
- C. There are no bodies of water or occupied dwellings near the wellsite.
- D. An archeological survey has been conducted on the access road and wellsite and copies sent to the BLM.

13. COMPANY REPRESENTATIVE

Mr. R. A. Hazel  
100 Chevron Road  
Rangely, Colorado 81648  
(303) 675-3700

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Chevron U.S.A. Production Co. and its contractors

and its subcontractors in conformity with the plan and the terms and conditions under which it is approved.

6/11/90  
Date

R. A. Hazel  
R. A. Hazel  
Unit Drilling Superintendent

- Map A - Proposed location and access
- Map B - Proposed location and road
- Exhibit C - Location layout, cut \ fill

WONSITS VALLEY  
FEDERAL UNIT

17

Gulf 1  
GYPSUM HILLS UNIT 8675

78 16 75 141

112 DU 65 109 15 124

72 142 74 134

132 67 133 60 123

Gulf  
GYPSUM HILLS  
5350

GYPSUM HILL  
3

136 126

135-2  
135

130  
ND

GYPSUM HILLS  
81

COSTAS FED.  
3-21-10

COSTAS FED.  
4-21-10

COSTAS FED.  
5-21  
PUMP  
STATION  
ABANDONED

84-2

T  
8  
S

20

Gulf  
1-20-48  
COASTAS-FED.  
5425

COSTAS FED.  
5321  
2-20-38

21  
GYPSUM HILLS  
10

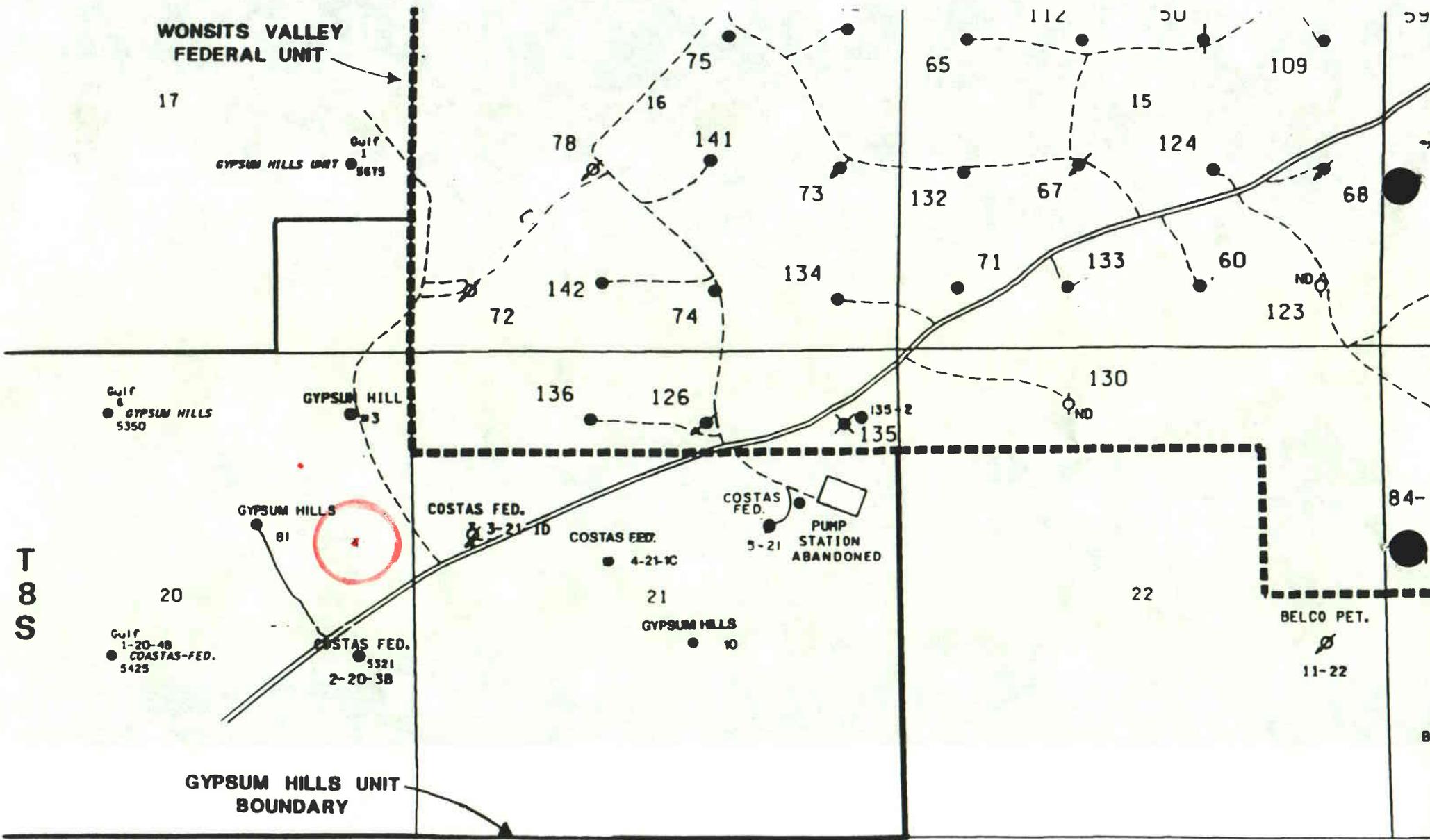
22

BELCO PET.  
11-22

GYPSUM HILLS UNIT  
BOUNDARY

MAP B

R 21 E



FOR Champion USA Prod Co N-0010 DATE 10/19/90

WELL NAME Gypsum Hills #9

SECTION 00 T 8S R 01E COUNTY Mitchell

43-047-30304  
API NUMBER

Individual (1)  
TYPE OF LEASE

CHECK OFF:

PLAT.

BOND

NEAREST WELL

LEASE

FIELD SLBM

POTASH OR OIL SHALE

PROCESSING COMMENTS:

Included in POD 900 approved 3-10-90. per lease water permit

APPROVAL LETTER:

PACING:

R615-3-3  
~~R615-2-3~~

Gypsum Hills  
UNIT

R615-3-2

N/A  
CAUSE NO. & DATE

R615-3-3

CONTINGENCIES:

1- water permit

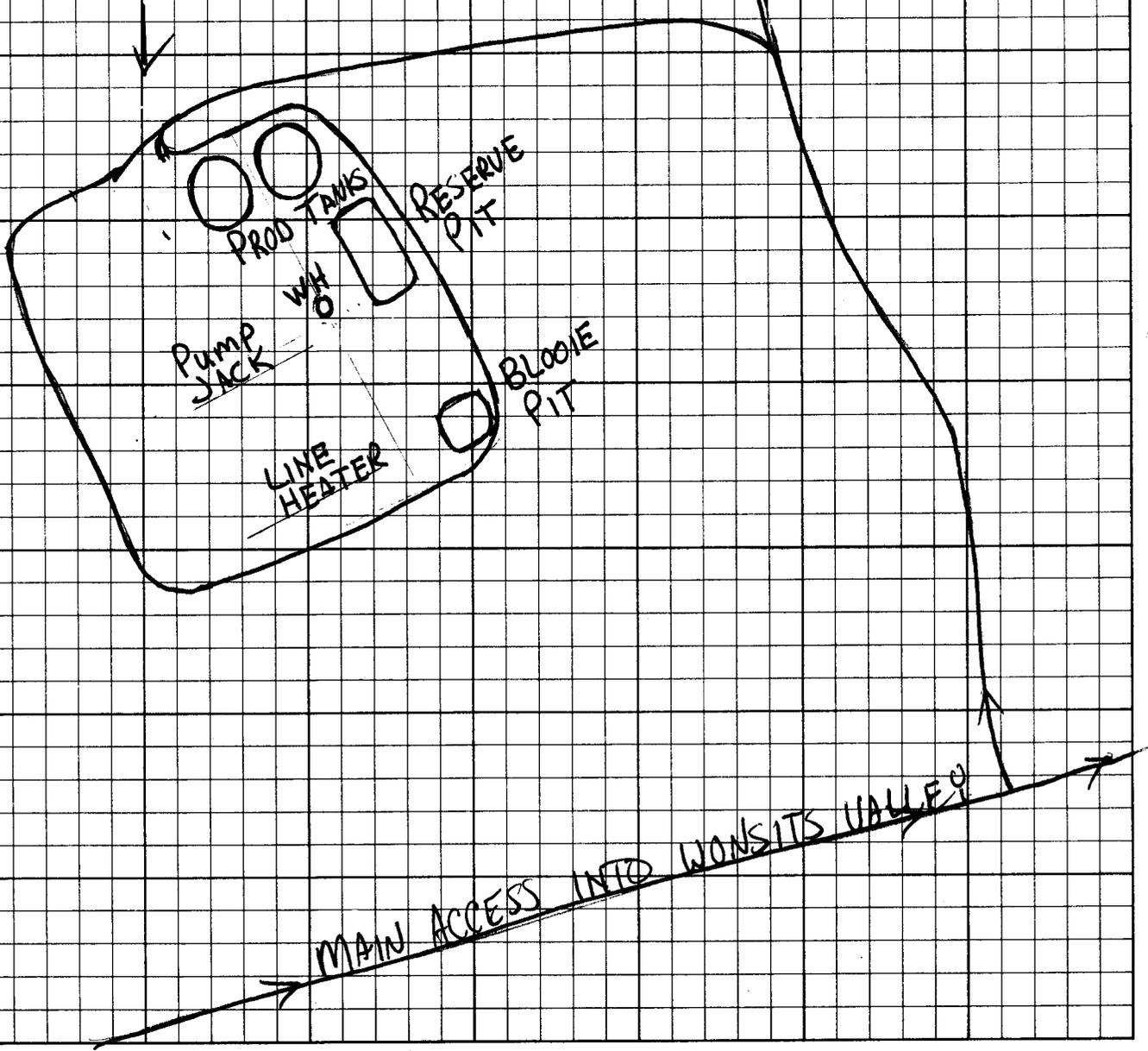
G43

43-047-32304

CHEVRON USA INC

GYPSUM HILLS #9

SEC 20 8S 21E





# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Norman H. Bangerter

Governor

Dee C. Hansen

Executive Director

Dianne R. Nielson, Ph.D.

Division Director

355 West North Temple

3 Triad Center, Suite 350

Salt Lake City, Utah 84180-1203

801-538-5340

June 22, 1992

Chevron U.S.A. Production Co.  
100 Chevron Road  
Rangely, Colorado 81648

Gentlemen:

Re: Gypsum Hills #9 Well, 2056 feet from the north line, 663 feet from the east line, SE 1/4 NE 1/4, Section 20, Township 8 South, Range 21 East, Uintah County, Utah

Pursuant to Utah Code Ann. § 40-6-18, (1953, as amended), Utah Admin. R. 649-2-3, and Utah R. 649-3-4, approval to drill the referenced well is hereby granted.

In addition, the following specific actions are necessary to fully comply with this approval:

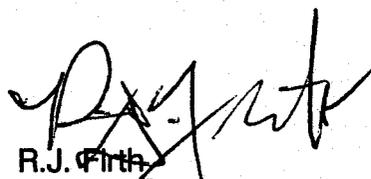
1. Compliance with the requirements of Utah Admin. R. 649-1 et seq., Oil and Gas Conservation General Rules.
2. Notification within 24 hours after drilling operations commence.
3. Submittal of Entity Action Form, Form 6, within five working days following commencement of drilling operations and whenever a change in operations or interests necessitates an entity status change.
4. Submittal of the Report of Water Encountered During Drilling, Form 7.
5. Prompt notification prior to commencing operations, if necessary, to plug and abandon the well. Notify Frank R. Matthews, Petroleum Engineer, (Office) (801)538-5340, (Home) (801)476-8613, or R.J. Firth, Associate Director, (Home) (801)571-6068.
6. Compliance with the requirements of Utah Admin. R. 649-3-20, Gas Flaring or Venting, if the well is completed for production.

Page 2  
Chevron U.S.A. Production Co.  
Gypsum Hills #9  
June 22, 1992

Trash and sanitary waste should be properly contained and transported to approved disposal locations, not retained in or disposed of in pits on location or downhole. Prior to the commencement of drilling operations, the operator should consult the local/county sanitarian and/or the Department of Environmental Quality, Division of Drinking Water/Sanitation, regarding appropriate disposal of sanitary waste.

This approval shall expire one year after date of issuance unless substantial and continuous operation is underway or a request for an extension is made prior to the approval expiration date. The API number assigned to this well is 43-047-32304.

Sincerely,



R.J. Firth  
Associate Director, Oil and Gas

ldc  
Enclosures  
cc: Bureau of Land Management  
J.L. Thompson  
WO1

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK  
 DRILL  DEEPEN

b. TYPE OF WELL  
 OIL WELL  GAS WELL  OTHER  SINGLE ZONE  MULTIPLE ZONE

2. NAME OF OPERATOR  
 Chevron U.S.A. Production Co.

3. ADDRESS AND TELEPHONE NO.  
 100 Chevron Rd., Rangely, CO 81648 (303) 675-3700

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)  
 At surface 2056' FNL & 666' FEL (SE NE) Sec. 20  
 At proposed prod. zone As above

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 6.9 miles northeast of Ouray, UT

16. NO. OF ACRES IN LEASE  
 1237.99

17. NO. OF ACRES ASSIGNED TO THIS WELL  
 40

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.  
 666'

19. PROPOSED DEPTH  
 ±5300' MD & TVD

20. ROTARY OR CABLE TOOLS  
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 GR 4683'

22. APPROX. DATE WORK WILL START\*  
 August 1, 1992

5. LEASE DESIGNATION AND SERIAL NO.  
 U-01407480

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
 Ute-Ouray

7. UNIT AGREEMENT NAME  
 Gypsum Hills Unit

8. FARM OR LEASE NAME, WELL NO.  
 Gypsum Hills #9

9. API WELL NO.  
 43-047-32704

10. FIELD AND POOL, OR WELDCAT  
 Gypsum Hills, Green River

11. SEC., T., R., M., OR BLM. AND SURVEY OR AREA  
 20, 8S, 21E

12. COUNTY OR PARISH  
 Uintah

13. STATE  
 UT

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	K-55 8 5/8"	24#	± 500'	±300 sxs
7 7/8"	K-55 5 1/2"	17#	±5300'	To be determined by logs

Attachments: Certified Plat  
 Drilling Program  
 Chevron Class III BOPE  
 Geologic Program  
 Multipoint Surface Use Plan

Completion Procedure to be submitted by Sundry Notice.

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NOV 24 1992

DIVISION OF  
 OIL GAS & MINING

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED *ois* J. D. Howard J. D. Howard TITLE Drilling Technologist DATE 6-15-92

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

CONDITIONS OF APPROVAL ATTACHED TO OPERATOR'S COPY

NOTICE OF APPROVAL

APPROVED BY Jerry Knepper TITLE Acting ADM- Minerals DATE 11/23/92

Ut 080-2m-199

\*See Instructions On Reverse Side

## memorandum

[NOV 18 1992]

DATE:

REPLY TO: Superintendent, Uintah & Ouray Agency  
ATTN OF:SUBJECT: Concurrence letter for Chevron U.S.A. Inc.,  
H62-92-15 Gypsum Hills #9 Section 20 & 21, T8S., R21E.,  
Uintah County, UtahTO: Bureau of Land Management, Vernal District Office  
Attn: Paul Andrews, Area ManagerBased on available information received on October, 1992,  
we have cleared the proposed locations in the following areas of  
environmental impact.

YES	<input checked="" type="checkbox"/>	NO	<input type="checkbox"/>	Listed Threatened or Endangered Species
YES	<input checked="" type="checkbox"/>	NO	<input type="checkbox"/>	Critical Wildlife Habitat
YES	<input checked="" type="checkbox"/>	NO	<input type="checkbox"/>	Archeological or Cultural Resources
YES	<input type="checkbox"/>	NO	<input type="checkbox"/>	Air Quality Aspects (to be used only if project is in or adjacent to a Class I Area of Attainment)
YES	<input type="checkbox"/>	NO	<input type="checkbox"/>	Other (If Necessary)

REMARKS: The necessary surface protection and rehabilitation  
requirements are as per approved APD.Per ENVIRONMENTAL ANALYSIS REPORT (copy attached)  
#6 MITIGATION STIPULATIONS:

Strict adherence to the mitigations stipulations is required.



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NOV 18 1992

**SITE SPECIFIC  
ENVIRONMENTAL ANALYSIS**

**1.0 PROPOSED ACTION**

CHEVRON U.S.A. INC. IS PROPOSING TO DRILL AN OIL WELL.

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**2.0 ALTERNATIVE ACTIONS**

- A. ALTERNATIVE CONSIDERED: The proposed action is the preferred alternative.
- B. NO ACTION: Under the no action alternative the proposed action would not be implemented.
- C. OTHER: \_\_\_\_\_
- 
- 

**3.0 PERMITTEE/LOCATION**

- A. Permittee CHEVRON U.S.A. INC.
- B. Date NOVEMBER 20, 1991
- C. Well number GYPSUM #9
- D. Right-of-way \_\_\_\_\_
- E. Site location SENE Section 20 T 8S R 21E Meridian SLM

**4.0 SITE SPECIFIC SURVEY**

**A. SITE DESCRIPTION**

1. Elevation (feet) \_\_\_\_\_
2. Annual precipitation (inches) 4-8 INCHES
3. Topography FLAT
4. Soil texture (0 to 6") CLAY LOAM
5. Estimated infiltration rate:  
Slow  Moderate \_\_\_\_\_ High \_\_\_\_\_

**B. VEGETATION**

1. Habitat Type:  
 Semi-desert shrub \_\_\_\_\_ Upland Pinion/Juniper  
 Upland shrub \_\_\_\_\_ Mountain  
Other: \_\_\_\_\_
2. Percent Ground Cover 10 %

3. Vegetation: (Estimated % composition)

a. Grasses: 20 %

_____ Western wheatgrass	_____ Indian ricegrass
_____ Needle-and-thread grass	_____ Three-awn
_____ Idaho fescue	_____ Wire grass
_____ Prairie junegrass	_____ Bluebunch wheatgrass
_____ Tall wheatgrass	_____ Slender wheatgrass
_____ Great Basin wildrye	<u>20</u> _____ Galleta
_____ Kentucky bluegrass	_____ Orchard grass
_____ Thickspike wheatgrass	_____ Squirrel tail
_____ Blue gramma	_____ Bluegrasses
_____ Brome grasses	_____ Dropseed
_____ Annuals	_____

b. Forbs: 10 %

_____ Russian thistle	_____ Lupine
_____ Globemallow	_____ Lamb's quarter
_____ Kochia	_____ Giant whitetop
_____ Astragalus	<u>5</u> _____ Annuals
_____ Indian paintbrush	
<u>5</u> _____ Halogeton	
_____ Ragweed	

c. Shrubs: 70 %

_____ Fourwing saltbush	_____ Snowberry
_____ Black sagebrush	_____ Pricklypear
_____ Rabbitbrush	<u>40</u> _____ Greasewood
_____ Mountain mahogany	_____ Shadscale
_____ Serviceberry	_____ Horsebrush
_____ Bitterbrush	<u>30</u> _____ Nuttall saltbush
_____ Big sagebrush	_____ Spiny Horsebrush
_____ Yellow Brush	_____ Shadscale
	_____ Other

d. Trees: 0 %

_____ Pinion	_____ Douglas fir
_____ Juniper	_____ Lodgepole pine
_____ Cottonwood	_____ Engleman spruce
_____ Russian olive	
_____ Tamarix	
_____ Ponderosa	

4. Observed Threatened & Endangered species: NONE

5. Potential For Threatened & Endangered species:

X Slight \_\_\_\_\_ Moderate \_\_\_\_\_ High

6. If moderate or high describe: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_



7. Observed Noxious Weeds: 1) NONE 2) \_\_\_\_\_  
 3) \_\_\_\_\_ 4) \_\_\_\_\_

C. AFFECTED ENVIRONMENTAL

Initial survey:

1. Surface damages as a result of the initial survey:  
 \_\_\_\_\_ yes X no

2. If answer to (1) is yes describe: \_\_\_\_\_  
 \_\_\_\_\_

4.1 WILDLIFE

A. POTENTIAL SITE UTILIZATION

- |                   |                     |                        |
|-------------------|---------------------|------------------------|
| 1. Big Game       | 2. Small Game       | 3. Raptor/Bird         |
| <u>X</u> Deer     | <u>X</u> Rabbit     | _____ Bald eagle       |
| _____ Elk         | _____ Pheasant      | <u>X</u> Golden eagle  |
| _____ Moose       | <u>X</u> Dove       | _____ Ferringious hawk |
| _____ Bear        | _____ Sage grouse   | _____ Swanson hawk     |
| <u>X</u> Antelope | _____ Ruffed grouse | <u>X</u> Redtail hawk  |
| _____             | _____ Blue grouse   | _____ Perigrin falcon  |
| _____             | _____ Chuckar       | _____ Prairie falcon   |
| _____             | _____ partridge     | <u>X</u> Songbird      |
| _____             |                     |                        |

- |                 |                      |
|-----------------|----------------------|
| 4. Other        | 5. Non-Game Wildlife |
| <u>X</u> Horses | <u>X</u> Reptile     |
| _____ Cattle    | _____ Prairie dog    |
| _____ Sheep     | <u>X</u> Rodent      |
| _____           | <u>X</u> Coyote      |
| _____           | <u>X</u> Fox         |

6. Threatened & Endangered Species

a. Observed Threatened & Endangered species:  
 1) NONE 2) \_\_\_\_\_ 3) \_\_\_\_\_

b. Potential for Threatened & Endangered species:  
X Slight \_\_\_\_\_ Moderate \_\_\_\_\_ High

c. If moderate or high, describe: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

D. WILDLIFE/THREATENED & ENDANGERED SPECIES

1. Decreased wildlife habitat/grazing  X  Yes   No
2. Potential increase in wildlife disturbance and poaching  X  Yes   No
3. Potential impacts to Threatened Endangered species:   Yes  X  No
4. Potential threat to critical wildlife habitat   Yes  X  No
- a. If answer to (4) is yes, describe: \_\_\_\_\_
- 
- 

6.0 MITIGATION STIPULATIONS

A. VEGETATION/LANDSCAPE

1. Landscape disturbance cannot be effectively mitigated at this time. However, before the site is abandoned the company will be required to restore the well pad, access roads, and pipeline rights-of-way to near their original states. The disturbed area will be reseeded with desirable perennial vegetation and the seed will be covered with a weed free organic mulch.
2. Noxious weeds will be controlled on all well sites and rights-of-way. If noxious weeds spread from the well sites or rights-of-way, the company will also be responsible for their control.

B. SOILS/RANGE/WATERSHEDS

1. Soil erosion will be mitigated by reseeded all disturbed areas and by installing the following practices:

- |                        |            |     |            |    |          |        |
|------------------------|------------|-----|------------|----|----------|--------|
| a. Diversion ditches   | <u> </u>   | Yes | <u> X </u> | No | <u> </u> | feet   |
| b. Dikes               | <u> </u>   | Yes | <u> X </u> | No | <u> </u> | feet   |
| c. Desilting ponds     | <u> </u>   | Yes | <u> X </u> | No | <u> </u> | number |
| d. Drop structure      | <u> </u>   | Yes | <u> X </u> | No | <u> </u> | number |
| e. Gully plugs         | <u> </u>   | Yes | <u> X </u> | No | <u> </u> | number |
| f. High water crossing | <u> </u>   | Yes | <u> X </u> | No | <u> </u> | number |
| g. Culverts            | <u> </u>   | Yes | <u> X </u> | No | <u> </u> | number |
| h. Water bars          | <u> </u>   | Yes | <u> X </u> | No | <u> </u> | number |
| i. Fencing             | <u> X </u> | Yes | <u> </u>   | No | <u> </u> | rods   |
| j. Cattleguards        | <u> </u>   | Yes | <u> X </u> | No | <u> </u> | number |
| k. Other, describe:    | _____      |     |            |    |          |        |
- 
-

2. Salt and pollution loading of the soil and geological formations will be mitigated by requiring the oil company to:

a. Line reserve pits with impervious synthetic liners  
impervious synthetic liners  yes  no

b. Use a closed drilling system  yes  no  
1. Reason(s): \_\_\_\_\_  
\_\_\_\_\_

c. Use a closed production system  yes  no  
1. Reason(s): SEE ITEM 8-A  
\_\_\_\_\_  
\_\_\_\_\_

d. Use an unlined emergency pit  yes  no  
1. Use a synthetic liner  yes  no  
2. Use a man made container  yes  no  
3. Reason(s): SEE ITEM 8-A  
\_\_\_\_\_  
\_\_\_\_\_

e. Production water, oil, and other by-products will not be applied to roads or well pads for the control of dust or weeds. Indiscriminate dumping of oil field by-products on tribal lands will not be allowed.

3. When the well is plugged and/or abandoned the gravel and road base hauled in to construct the well pad and access roads will be:

a. Hauled off  yes  no

b. Incorporated into the soil  yes  no

4. Soil compaction of the well pads and roads will be mitigated by ripping (minimum depth 24").

C. WILDLIFE/VEGETATION/THREATENED & ENDANGERED SPECIES

1. Upon Identification of Threatened & Endangered species, the following measures will be applied: N/A  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. Modifications to surface use will be required to protect the specific wildlife species and their habitat.

#### D. CULTURAL RESOURCES

All well sites, access roads, and pipeline rights-of-way will be cleared by a qualified archaeologist/paleontologist so that cultural sites will be avoided or salvaged.

### 7.0 UNAVOIDABLE ADVERSE IMPACTS

#### A. SURFACE ALTERATIONS

None of the adverse impacts listed in 5.0 above can be avoided in a practical manner except those which are mitigated in item 6.0 above and those specified in BLM's 13 point surface use plan.

#### B. RELATIONS SHORT-TERM USE OF THE ENVIRONMENT VS LONG TERM PRODUCTIVITY.

1. **Short Term:** (Estimated 20 years) A total loss production on the land and the associated environmental impacts will continue to influence the surrounding area for the productive life of the well.
2. **Long Term:** Standard policies provide for rehabilitation of the well sites and access roads. After the land is rehabilitated, it is not expected to return to its original productive capability. Normally, there will be a permanent scar left on the landscape.

#### C. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT

Oil and Gas are non-renewable resources, once they have been removed they can never be replaced.

### 8.0 CUMULATIVE IMPACTS

#### A. FULL DEVELOPMENT

Each additional well drilled for development increases the erosion potential, reduces wildlife habitat and grazing, causes soil and geologic pollution resulting from potential to recover, and

Yes        No        life habitat  
  X   Yes        No        Historical and cultural resources

**10.0 REMARKS**

A. SURFACE PROTECTION/REHABILITATION

All essential surface protection and rehabilitation requirements are specified above.

**11.0 RECOMMENDATIONS**

A. APPROVAL/DISAPPROVAL

We recommend approval   X   disapproval        of the proposed action as outlined in item 1.0 above.

*Dale A. Gumbert*  
Representative - BIA Land Operations,  
Uintah and Ouray Agency

**12.0 REVIEWING OFFICIAL**

A. CONCURRENCE

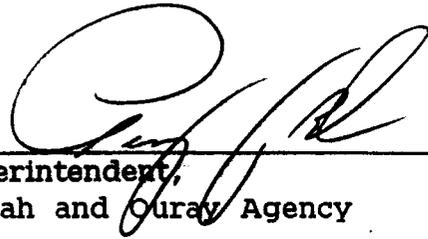
We concur with the approval   ✓   disapproval        of the proposed action as outlined in item 1.0 above.

*Stanley D. [unclear]* 11/19/92  
Environmental Coordinator,  
Uintah and Ouray Agency

**13.0 DECLARATION**

**A. APPROVAL**

It has been determined that the proposed action is not a federal action significantly affecting the quality of the environment as it would require the preparation of an environmental impact statement in accordance with Section 102 (2) (c) of the National Environmental Policy Act of 1969 (42 USC 4331) (2) (C).



---

Superintendent,  
Uintah and Ouray Agency

**14.0 CONSULTATION**

**A. REPRESENTATIVES/ORGANIZATION**

1. BRENT SAXTON-CHEVRON U.S.A. INC.
2. GERALD AHRENS-CHEVRON U.S.A INC.
3. BYRAN TOLMAN-BLM
4. KEVIN IGNACIO-UTEM
5. DALE HANBERG-BIA
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_

## WELL LOCATION INFORMATION

Company/Operator Chevron U.S.A.  
API Number 43-047-32304  
Well Name & Number Gypsum Hills #9  
Lease Number U-0140740  
Location SENE Sec. 20 T. 8S. R. 21E.  
Surface Ownership Ute Tribe  
Date NOS Received 11/14/91  
Date APD Received 6/18/92

## NOTIFICATION REQUIREMENTS

- Location Construction - at least forty-eight (48) hours prior to construction of location and access roads.
- Location Completion - prior to moving on the drilling rig.
- Spud Notice - at least twenty-four (24) hours prior to spudding the well.
- Casing String and Cementing - at least twenty-four (24) hours prior to running casing and cementing all casing strings.
- BOP and Related Equipment Tests - at least twenty-four (24) hours prior to initiating pressure tests.
- First Production Notice - within five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

Planned Access Roads—describe the following and provide a map of suitable scale indicating all necessary access roads (permanent and temporary) to be constructed or reconstructed, showing the access road will be built up with pit run materials hauled in from an outside source.

All travel will be confined to existing access road rights-of-way.

Access roads and surface disturbing activities will conform to standards outlined in the Bureau of Land Management and Forest Service publication: Surface Operating Standards for Oil and Gas Exploration and Development, (1989).

A closed production system will be used. No disposal or emergency pits will be allowed.

If storage facilities/tank batteries are constructed on this lease, the facility/battery or the well pad shall be surrounded by a containment dike of sufficient capacity to contain, at a minimum, the entire content of the largest tank within the facility/battery, unless more stringent protective requirements are deemed necessary by the authorized officer.

All permanent (on site for six months or longer) structures constructed or installed (including pumping units) will be painted a flat, non-reflective, earthtone color to match one of the standard environmental colors, as determined by the Rocky Mountain Five State Interagency Committee. All facilities will be painted within 6 months of installation. Facilities required to comply with O.S.H.A. (Occupational Safety and Health Act) will be excluded.

Burning will not be allowed. All trash must be contained in a trash cage and hauled away to an approved disposal site at the completion of the drilling activities.

All reserve pits will be lined with plastic sufficient to prevent seepage. (If a plastic nylon reinforced liner is used, it shall be torn and perforated after the pit dries and before backfilling of the reserve pit.)

Reserve Pits will be constructed so as not to leak, break, or allow discharge of liquids.

After first production, produced waste water will be confined to a lined pit or storage tank for a period not to exceed ninety (90) days. During the 90 day period, in accordance with NTL-2B, an application for approval of a permanent disposal method and location, along with required water analysis, shall be submitted for the AO's approval. Failure to file an application within the time allowed will be considered an incident of noncompliance.

#### Well Site Layout

It is not necessary to strip the topsoil on this location. Topsoil should be left in place and pit run material should be hauled in to build up the pad enough to allow water to drain around the location.

#### Fencing Requirements

All pits will be fenced according to the following minimum standards:

39-inch net wire shall be used with at least one strand of barbed wire on top of the net wire (barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence).

The net wire shall be no more than 2-inches above the ground. The barbed wire shall be 3-inches above the net wire. Total height of the fence shall be at least 42-inches.

Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.

Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than 16 feet.

All wire shall be stretched, by using a stretching device, before it is attached to the corner posts.

The reserve pit fencing will be on three sides during drilling operations and on the fourth side when the rig moves off the location. Pits will be fenced and maintained until clean-up.

#### Plans for Restoration of Surface

##### a. Producing Location

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, materials, trash, and junk not required for production.

Immediately upon well completion, any hydrocarbons on the pit shall be removed in accordance with 43 CFR 3162.7-1.

If a plastic nylon reinforced liner is used, it shall be torn and perforated before backfilling of the reserve pit.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours. The reserve pit will be reclaimed within 120 days from the date of well completion. Before any dirt work takes place, the reserve pit must be completely dry and all cans, barrels, pipe, etc., will be removed.

Contact appropriate surface management agency for required seed mixture.

##### b. Dry Hole Abandoned Location

At such time as the well is plugged and abandoned, the operator shall submit a subsequent report of abandonment and BLM will attach the appropriate surface rehabilitation conditions of approval.

#### On BIA administered lands:

Abandoned well sites, roads, or other disturbed areas will be restored to near their original condition. This procedure will include revegetation of the disturbed areas to the specifications of the Ute Indian Tribe or the BIA at the time of abandonment. The seeded area will be covered with a weed free organic mulch.

#### Surface Ownership

Access Road: Ute Tribal  
Location: Ute Tribal

#### Other Additional Information

- a. The operator is responsible for informing 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 is to immediately stop work that might further disturb such materials, and contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

-whether the materials appear eligible for the National Register of Historic Places;

-the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situation, preservation is not necessary); and

-a time frame for the AO to complete an expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense 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 then be allowed to resume construction.

- b. The operator will control noxious weeds along rights-of-way for roads, pipelines, well sites, or other applicable facilities. A list of noxious weeds may be obtained from the BLM, or the appropriate County Extension Office. On BLM administered land it is required that a Pesticide Use proposal shall be submitted, and given approval, prior to the application of herbicides or other pesticides or possible hazardous chemicals. If noxious weeds spread from the well site or ROW, the company will also be responsible for their control.
- c. Drilling rigs and/or equipment used during drilling operations on this wellsite will not be stacked or stored on Federal Lands after the conclusion of drilling operations or at any other time without BIA authorization. However, if BIA authorization is obtained, it is only a temporary measure to allow time to make arrangements for permanent storage on commercial facilities.

On BIA administered land:

Operator's employees, including subcontractors, will not gather firewood along roads constructed by operators. If wood cutting is required, a permit will be obtained from the Forestry Department of the BIA pursuant to 25 CFR 169.13 "Assessed Damages Incident to Right-of-Way Authorization". All operators, subcontractors, vendors and their employees or agents may not disturb saleable timber (including firewood) without a duly granted wood permit from the BIA Forester.

If the surface rights are owned by the Ute Indian Tribe and mineral rights are owned by another entity, an approved rights-of-way will be obtained from the BIA before the operator begins any construction activities. If the surface is owned by another entity and the mineral rights are owned by the Ute Indian Tribe, rights-of-way will be obtained from the other entity.

All roads constructed by operators on the Uinta and Ouray Indian Reservation will have appropriate signs. Signs will be neat and of sound construction. They will state: (a) that the land is owned by the Ute Indian Tribe, (b) the name of the operator, (c) that firearms are prohibited to all non-Ute Tribal members, (d) that permits must be obtained from the BIA before cutting firewood or other timber products and (e) only authorized personnel permitted.

All well site locations on the Uinta and Ouray Indian Reservation will have an appropriate sign indicating the name of the operator, the lease serial number, the well name and number, the survey description of the well (either footages or the quarter-quarter section, the section, township, and range).

CONDITIONS OF APPROVAL FOR NOTICE TO DRILL

Company Chevron U.S.A., Inc. Well No. Gypsum Hills #9  
Location SENE, Sec. 20, T8S, R21E Lease No. U - 0140740

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas Orders, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.

Be aware fire restrictions may be in effect when location is being constructed and/or when well is being drilled. Contact the appropriate Surface Management Agency for information.

A. DRILLING PROGRAM

1. Estimated Depth at Which Oil, Gas, Water, or Other Mineral Bearing Zones are Expected to be Encountered

Report ALL water shows and water-bearing sands to Tim Ingwell of this office. Copies of State of Utah form OGC-8-X are acceptable. If noticeable water flows are detected, submit samples to this office along with any water analyses conducted.

All usable water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling, will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

2. Pressure Control Equipment

The BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc., for a 3M system and individual components shall be operable as designed. Chart recorders shall be used for all pressure tests.

Test charts, with individual test results identified, shall be maintained on location while drilling and shall be made available to a BLM representative upon request.

The Vernal District Office shall be notified, at least 24 hours prior to initiating the pressure tests, in order to have a BLM representative on location during pressure testing.

### 3. Casing Program and Auxiliary Equipment

Surface casing shall have centralizers on the bottom three joints, with a minimum of one centralizer per joint.

As a minimum, the usable water and oil shale resources shall be isolated and/or protected by having a cement top for the production casing at least 200 ft. above the top of the Mahogany oil shale, identified at  $\pm$  3,300 ft.

The Vernal District Office shall be notified at least 24 hours prior to the running and cementing of all casing strings, in order to have a BLM representative on location while running and cementing all casing strings.

### 4. Mud Program and Circulating Medium

Hazardous substances specifically listed by the EPA as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing, or completion operations.

No chromate additives will be used in the mud system on Federal and Indian lands without prior BLM approval to ensure adequate protection of fresh water aquifers.

### 5. Coring, Logging and Testing Program

Daily drilling and completion progress reports shall be submitted to this office on a weekly basis.

All Drill Stem tests (DST) shall be accomplished during daylight hours, unless specific approval to start during other hours is obtained from the AO. However, DSTs may be allowed to continue at night if the test was initiated during daylight hours and the rate of flow is stabilized and if adequate lighting is available (i.e., lighting which is adequate for visibility and vaporproof for safe operations). Packers can be released, but tripping should not begin before daylight unless prior approval is obtained from the AO.

A cement bond log (CBL) will be run from the production casing shoe to  $\pm$  3,100 ft. and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.

Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core analyses, well-test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. Samples (cuttings, fluids, and/or gases) will be submitted when requested by the AO.

6. Notifications of Operations

No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the AO. If operations are to be suspended, prior approval of the AO will be obtained and notification given before resumption of operations.

The Vernal District Office shall be notified, during regular work hours (7:45 a.m.-4:30 p.m., Monday through Friday except holidays), at least 24 hours prior to spudding the well.

Operator shall report production data to MMS pursuant to 30 CFR 216.5 using form MMS/3160.

Immediate Report: Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported in accordance with the requirements of NTL-3A or its revision.

If a replacement rig is contemplated for completion operations, a "Sundry Notice" (Form 3160-5) to that effect will be filed, for prior approval of the AO, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig.

The date on which production is commenced or resumed will be construed for oil wells as the date on which liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which liquid hydrocarbons are first produced into a permanent storage facility, whichever first occurs; and, for gas wells as the date on which associated liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which gas is first measured through permanent metering facilities, whichever first occurs.

Should the well be successfully completed for production, the AO will be notified when the well is placed in a producing status. Such notification will be sent by telegram or other written communication, not later than five (5) days following the date on which the well is placed on production.

Gas produced from this well may not be vented or flared beyond an initial authorized test period of 30 days or 50 MMCF following its completion, whichever occurs first, without the prior written approval of the Authorized Officer. Should gas be vented or flared without approval beyond the authorized test period, the operator may be directed to shut-in the well until the gas can be captured or approval to continue venting or flaring as uneconomic is granted and the operator shall be required to compensate the lessor for that portion of the gas vented or flared without approval which is determined to have been avoidably lost.

A schematic facilities diagram as required by 43 CFR 3162.7-2, 3162.7-3, and 3162.7-4 shall be submitted to the appropriate District Office within thirty (30) days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with 43 CFR 3162.7-4.

No well abandonment operations will be commenced without the prior approval of the AO. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the AO. A "Subsequent Report of Abandonment" Form 3160-5, will be filed with the AO within thirty (30) days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the AO or his representative, or the appropriate Surface Managing Agency.

#### 7. Other Information

All loading lines will be placed inside the berm surrounding the tank battery.

All off-lease storage, off-lease measurement, or commingling onlease or off-lease will have prior written approval from the AO.

Gas meter runs for each well will be located within 500 feet of the wellhead. The gas flowline will be buried or anchored down from the wellhead to the meter and within 500 feet downstream of the meter run or any production facilities. Meter runs will be housed and/or fenced.

The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place prior to any deliveries. Tests for meter accuracy will be conducted monthly for the first three months on new meter installations and at least quarterly thereafter. The AO will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports will be submitted to the Vernal District Office. All meter measurement facilities will conform with Onshore Oil & Gas Order No. 4 for liquid hydrocarbons and Onshore Oil & Gas Order No. 5 for natural gas measurement.

The use of materials under BLM jurisdiction will conform to 43 CFR 3610.2-3.

There will be no deviation from the proposed drilling and/or workover program without prior approval from the AO. Safe drilling and operating practices must be observed. All wells, whether drilling, producing, suspended, or abandoned will be identified in accordance with 43 CFR 3162.

"Sundry Notice and Report on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3162.3-2.

Section 102(b)(3) of the Federal Oil and Gas Royalty Management Act of 1982, as implemented by the applicable provisions of the operating regulations at Title 43 CFR 3162.4-1(c), requires that "not later than the 5th business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site, or resumes production in the case of a well which has been off production for more than 90 days, the operator shall notify the authorized officer by letter or sundry notice, Form 3160-5, or orally to be followed by a letter or sundry notice, of the date on which such production has begun or resumed."

If you fail to comply with this requirement in the manner and time allowed, you shall be liable for a civil penalty of up to \$10,000 per violation for each day such violation continues, not to exceed a maximum of 20 days. See Section 109(c)(3) of the Federal Oil and Gas Royalty Management Act of 1982 and the implementing regulations at Title 43 CFR 3162.4-1(b)(5)(ii).

APD approval is valid for a period of one (1) year from the signature date. An extension period may be granted, if requested, prior to the expiration of the original approval period.

In the event after-hours approvals are necessary, please contact one of the following individuals:

Gerald E. Kenczka Petroleum Engineer	(801) 781-1190
Ed Forsman Petroleum Engineer	(801) 789-7077
BLM FAX Machine	(801) 789-3634

EPA'S LIST OF NONEXEMPT EXPLORATION AND PRODUCTION WASTES

While the following wastes are nonexempt, they are not necessarily hazardous.

Unused fracturing fluids or acids

Gas plant cooling tower cleaning wastes

Painting wastes

Oil and gas service company wastes, such as empty drums, drum rinsate, vacuum truck rinsate, sandblast media, painting wastes, spend solvents, spilled chemicals, and waste acids

Vacuum truck and drum rinsate from trucks and drums, transporting or containing nonexempt waste

Refinery wastes

Liquid and solid wastes generated by crude oil and tank bottom reclaimers

Used equipment lubrication oils

Waste compressor oil, filters, and blowdown

Used hydraulic fluids

Waste solvents

Waste in transportation pipeline-related pits

Caustic or acid cleaners

Boiler cleaning wastes

Boiler refractory bricks

Incinerator ash

Laboratory wastes

Sanitary wastes

Pesticide wastes

Radioactive tracer wastes

Drums, insulation and miscellaneous solids.

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

NAME OF COMPANY: CHEVRON USA 43-047-32304

WELL NAME: GYPSUM HILLS # 9

Section 20 Township 8S Range 21E County UINTAH

Drilling Contractor \_\_\_\_\_

Rig # \_\_\_\_\_

SPUDDED: Date 1-3-93

Time 3:00 PM

How DRY HOLE

Drilling will commence \_\_\_\_\_

Reported by DENNIS-DOGM

Telephone # \_\_\_\_\_

Date 1/4/93 SIGNED JLT

**UNITED STATES  
DEPARTMENT OF INTERIOR  
BUREAU OF LAND MANAGEMENT**

Form Approved  
Budget Bureau No. 1004-8135

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT-" for such proposals.

5. Lease Designation and Serial No.  
U-0140740

6. If Indian, Allote or Tribe Name  
Ute-Ouray

7. If Unit or CA. Agreement Designation  
Gypsum Hills Unit

8. Well Name and No.

Gypsum Hills #9

9. API Well No.  
43-047-32304

10. Field and Pool, or Exploratory Area  
Gypsum Hills, Green River

GREEN RIVER

11. County or Parish, State  
UINTAH  
UTAH

**SUBMIT IN TRIPLICATE**

1. Type of Well

OIL \_\_\_\_\_ GAS \_\_\_\_\_  
WELL  WELL  OTHER \_\_\_\_\_

2. Name of Operator

CHEVRON U.S.A. PRODUCTION INC

3. Address and Telephone No.

PO BOX 4876 Attn: VERLAND GRANBERRY  
HOUSTON, TX. 77210 (713) 754-5074

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

2056' FNL, 663' FEL  
SEC. 20, T8S, R21E

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent <input checked="" type="checkbox"/> Subsequent Report <input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Abandonment <input type="checkbox"/> Recompletion <input type="checkbox"/> Plugging Back <input type="checkbox"/> Casing Repair <input checked="" type="checkbox"/> Altering Casing <input type="checkbox"/> Other
	<input type="checkbox"/> Change of plans <input type="checkbox"/> New Construction <input type="checkbox"/> Non-Routine Fracturing <input type="checkbox"/> Water Shut-Off <input type="checkbox"/> Conversion to Injection

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*  
**THE PURPOSE OF THIS SUNDRY IS REQUEST CHANGE IN SURFACE CASING DESIGN.**

1. WE REQUEST APPROVAL TO SET +/-400' OF 8-5/8" K-55 24 #/FT SURFACE CASING TO BE CEMENTED WITH +/-250 SACKS OF 15.6 PPG YIELD 1.18 CU FT PER SACK CEMENT.

NOTE: VERBAL APPROVAL WAS GIVEN BY ED FORSMAN W/ BLM VERNAL 12/30/1992.

**RECEIVED**  
JAN 07 1993  
DIVISION OF  
OIL GAS & MINING

4-BLM/UTAH/RED W/2-DRLG

14. I hereby certify that the foregoing is true and correct

Signed Verland Granberry Title DRILLING TECHNICAL ASSISTANT Date 12-31-1992

(This space for State office use)

Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_  
Conditions of Approval, if any: \_\_\_\_\_

**UNITED STATES  
DEPARTMENT OF INTERIOR  
BUREAU OF LAND MANAGEMENT**

Form Approved  
Budget Bureau No.1004-8135

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT-" for such proposals.

5. Lease Designation and Serial No.  
U-0140740

6. If Indian, Allotee or Tribe Name  
Ute-Ouray

7. If Unit or CA. Agreement Designation  
Gypsum Hills Unit

8. Well Name and No.  
Gypsum Hills #9

9. API Well No.  
43-047-32304

10. Field and Pool, or Exploratory Area  
Gypsum Hills, Green River

11. County or Parish, State  
UINTAH  
UTAH

**SUBMIT IN TRIPLICATE**

1. Type of Well  
OIL  GAS   
WELL  WELL  OTHER

2. Name of Operator  
CHEVRON U.S.A. PRODUCTION INC

3. Address and Telephone No.  
PO BOX 4876 Attn: VERLAND GRANBERRY  
HOUSTON, TX. 77210 (713) 754-5074

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
2056' FNL, 663' FEL  
SEC. 20, T8S, R21E

**12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> Notice of Intent <input checked="" type="checkbox"/> Subsequent Report <input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Abandonment <input type="checkbox"/> Recompletion <input type="checkbox"/> Plugging Back <input type="checkbox"/> Casing Repair <input type="checkbox"/> Altering Casing <input type="checkbox"/> Other	<input type="checkbox"/> Change of plans <input type="checkbox"/> New Construction <input type="checkbox"/> Non-Routine Fracturing <input type="checkbox"/> Water Shut-Off <input type="checkbox"/> Conversion to Injection
(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)		

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*  
**THE PURPOSE OF THIS SUNDRY IS TO REPORT ON SETTING SURFACE CASING.**

- DRILLED TO 408' W/ 12-1/4" BIT USING AIR. (01/06/1993)
- RAN 398' 8-5/8" 24#/FT K-55 CASING W/ CENTRALIZERS 10' ABOVE SHOE, 1 ON FIRST COLLAR, AND 1 ON THIRD COLLAR. (01/07/1993)
- CEMENTED W/ 265 SACKS OF CLASS G CEMENT W/2% CaCl & .25 LB/SACK FLOCELE MIXED AT 15.6 PPG. CIRC 120 SACKS TO SURFACE. (01/07/1993)
- RIG DOWN MOVE OUT TOP HOLE RIG. (01/08/1993)

**RECEIVED**  
JAN 11 1993  
DIVISION OF  
OIL GAS & MINING

4-BLM/UTAH/RED W/2-DRLG

14. I hereby certify that the foregoing is true and correct  
Signed Verland Granberry Title DRILLING TECHNICAL ASSISTANT Date 01/08/1993

(This space for State office use)  
Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_  
Conditions of Approval, if any: \_\_\_\_\_

UNITED STATES  
DEPARTMENT OF INTERIOR  
BUREAU OF LAND MANAGEMENT

Form Approved  
Budget Bureau No. 1004-8135

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT-" for such proposals.

5. Lease Designation and Serial No.  
U-0140740

6. If Indian, Allotte or Tribe Name  
Ute-Ouray

SUBMIT IN TRIPLICATE

7. If Unit or CA. Agreement Designation  
Gypsum Hills Unit

1. Type of Well

OIL WELL  GAS WELL  OTHER WELL

8. Well Name and No.

Gypsum Hills #9

2. Name of Operator

CHEVRON U.S.A. PRODUCTION INC

9. API Well No.  
43-047-32304

3. Address and Telephone No.

PO BOX 4876 Attn: VERLAND GRANBERRY  
HOUSTON, TX. 77210 (713) 754-5074

10. Field and Pool, or Exploratory Area  
Gypsum Hills, Green River  
GREEN RIVER

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

2056' FNL, 663' FEL  
SEC. 20, T8S, R21E

11. County or Parish, State  
UINTAH  
UTAH

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

TYPE OF ACTION

- Notice of Intent
- Subsequent Report
- Final Abandonment Notice

- Abandonment
- Recompletion
- Plugging Back
- Casing Repair
- Altering Casing
- Other

- Change of plans
- New Construction
- Non-Routine Fracturing
- Water Shut-Off
- Conversion to Injection

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*  
THE PURPOSE OF THIS SUNDRY IS TO NOTIFY YOU THAT WE SPUDDED THE WELL.

THE WELL WAS SPUDDED AT 1500 HOURS 01/03/1993 USING TOP HOLE'S RIG.

NOTE: BLM WAS NOTIFIED VERBALLY OF SPUD 01/02/1993.

NOTE: DAVIS INGRAM OF UTAH DIVISION OF OIL, GAS AND MINING WAS NOTIFIED VERBALLY OF SPUD 01/04/1993.

RECEIVED

JAN 25 1993

DIVISION OF  
OIL, GAS & MINING

4-BLM/UTAH/RED W/2-DRLG

14. I hereby certify that the foregoing is true and correct

Signed

*Verland Granberry*

Title

DRILLING TECHNICAL ASSISTANT

Date

1-22-1993

(This space for State office use)

Approved by

Title

Date

Conditions of Approval, if any:



# ROCKY MOUNTAIN GEO-ENGINEERING CO.

WELL LOGGING — CORE and WATER ANALYSIS

2450 INDUSTRIAL BLVD.

PHONE 243-3044

GRAND JUNCTION, COLORADO 81505

COMPANY CHEVRON USA

WELL NO. GYPSUM HILLS #9

LOCATION S20 T8S R21E Uinta Co., UTAH

ZONE OF INTEREST NO. 1

INTERVAL: From 5199' To 5208'

DRILL RATE: Abv 4min/' Thru 2min/' Below 4.5min/'

### MUD GAS-CHROMATOGRAPH DATA

	TOTAL	C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	C <sub>4</sub>	C <sub>5</sub>	OTHER
Before	80	100	100	50	tr		
During	1040	80000	11900	6400	3100	tr	
After	270	32000	2000	1700	200		

Type gas increase: Gradual  Sharp

Gas variation within zone: Steady  Erratic  Increasing  Decreasing

CARBIDE HOLE RATIO:  $\frac{\text{GRAMS}}{\text{READING}}$  X Min. in Peak = \_\_\_\_\_ Sensitivity: Poor  Fair  Good

FLUO: Mineral  Even  Spotty  CUT: None  Streaming   
 None  % in total sample 90% Poor  Slow   
 Poor  Fair  Mod   
 Fair  % in show lithology 100% Good  Fast   
 Good  COLOR: gold yellow COLOR: yellow

STAIN: None  Poor  Fair  Good  Live  Dead  Residue  Even  Spotty  Lt.  Dk.

POROSITY: Poor  Fair  Good  Kind intercrystalline, fos

LITHOLOGY LS lt-dkbrn tan gybrn, f-crpxl, sbblky-plty, frm, foss ip, shly ip

SAMPLE QUALITY adequate

NOTIFIED Mary Schuh @ 3:15 am HRS. DATE: 1/26/93

REMARKS \_\_\_\_\_

ZONE DESCRIBED BY William Monroe





# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Norman H. Bangertter  
Governor  
Dee C. Hansen  
Executive Director  
Dianne R. Nielson, Ph.D.  
Division Director

355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203  
801-538-5340

January 29, 1993

Chevron U.S.A. Inc.  
P. O. Box J, Section 975  
Concord, California 94524

Gentlemen:

Re: Request for Completed Entity Action Form  
Gypsum Hills 9 - SENE Sec. 20, T. 8S, R. 21E - Uintah County,  
Utah

This is written to remind you that all well operators are responsible for sending an Entity Action Form to the Division of Oil, Gas and Mining within five working days of spudding a new well. This office was notified that your company spudded the Gypsum Hills 9, API Number 43-047-32304, on January 1, 1993. At this time, we have not received an Entity Action Form for this well.

Please review the instructions on the back of the enclosed form. Make sure you choose the proper Action Code to show whether the well will be a single well with its own sales facilities (Code A), a well being added to an existing group of wells having the same tank battery and common division of royalty interest (Code B - show existing Entity Number to which well should be added), or a well being drilled in the participating area of a properly designated unit (Code B). Complete the form and return it to us by February 8, 1993.

Your attention to this matter is appreciated. If we can be of assistance to you, please feel free to call Lisha Cordova at the above number.

Sincerely,

Don Staley  
Administrative Supervisor

lec  
Enclosure  
cc: R. J. Firth  
File

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals

5. Lease Designation and Serial No.  
**U-0140740**

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation  
**Gypsum Hills (SR) Unit**

8. Well Name and No.  
**GHU #9**

9. API Well No.  
**43-047-32304**

10. Field and Pool, or Exploratory Area  
**Wonsits Valley-Grn. River**

11. County or Parish, State  
**Uintah, Utah**

**SUBMIT IN TRIPLICATE**

1. Type of Well  
Oil  Gas   
 Well  Well  Other

2. Name of Operator  
**Chevron U.S.A. Inc.**

3. Address and Telephone No.  
**P.O. Box 455, Vernal, Utah 84078 (801) 789-2442**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
**2056' FNL, 663' FEL, SEC. 20-T8S-R21E**

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other <b>Completion</b>
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

(Note) Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

We propose to complete the subject well as follows:

1. Drill/clean out to PBSD of +/-5310'.
2. Run GR-CBL-CCL from PBSD to surface casing shoe.
3. Perforate the G<sub>1</sub> Lime 5200-5210' (HLS GR-Density-Neutron, 1/27/93) with 4 JSPF.
4. Set packer at +/-5150' and acid fracture using 20000 gal. 28% HCl. Flow/swab treatment volume back.
5. Equip to produce (anticipate using rod pumping equipment).

**RECEIVED**

ACCEPTED BY THE STATE  
CENTRAL DIVISION OF  
FEB 04 1993

2-5-93

DIVISION OF  
OIL GAS & MINING

14. I hereby certify that the foregoing is true and correct

Signed *John Peterson* Title *Petroleum Engineer* Date *2/1/93*

(This space for Federal or State office use)

Approved by: \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

✳ See instruction on Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals

**SUBMIT IN TRIPLICATE**

1. Type of Well  
Oil Gas  
 Well  Well  Other

2. Name of Operator  
**Chevron U.S.A. Inc.**

3. Address and Telephone No.  
**P.O. Box 455, Vernal, Utah 84078 (801) 789-2442**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
**2056' FNL, 663' FEL, S20-T8S-R21E**

5. Lease Designation and Serial No.  
**U-0140740**

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation  
**Gypsum Hills Unit**

8. Well Name and No.  
**GHU #9**

9. API Well No.  
**43-047-32304**

10. Field and Pool, or Exploratory Area  
**Gypsum Hills-Grn. River**

11. County or Parish, State  
**Uintah, Utah**

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other <b>1st. PROD.</b>
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

(Note) Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

**Subject well was placed on production via rod pump on 2/13/93 at an initial rate of 350 BOPD, 51 BWPD and 0 MCF/D.**

**RECEIVED**

FEB 18 1993

DIVISION OF  
OIL GAS & MINING

14. I hereby certify that the foregoing is true and correct

Signed *[Signature]* Title *Petroleum Engineer* Date 2/15/93

(This space for Federal or State office use)

Approved by: \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

✳ See instruction on Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE

(See other instructions on reverse side)

Form approved.  
Budget Bureau No. 1004-0137  
Expires August 31, 1985

**RECEIVED**

MAR 01 1993

WELL COMPLETION OR RECOMPLETION AND LOG

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY   
 b. TYPE OF COMPLETION: NEW WELL  WORK OVER  DEEP-EN  PLUG BACK  DIFF. RESRV.  Other \_\_\_\_\_

2. NAME OF OPERATOR  
Chevron U.S.A. Production Co.

3. ADDRESS OF OPERATOR  
P. O. Box 455, Vernal, UT 84078 (801) 789-2442

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*  
 At surface 2056' FNL, 663' FEL  
 At top prod. interval reported below Same  
 At total depth Same

14. PERMIT NO. 43-047-32304 DATE ISSUED 11/22/92

5. LEASE DESIGNATION AND SERIAL NO.  
U-0140740

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

UNIT AGREEMENT NAME  
Gypsum Hills Unit

7. FARM OR LEASE NAME  
Gypsum Hills

9. WELL NO.  
#9

10. FIELD AND POOL, OR WILDCAT  
Gypsum Hills-Green River

11. SEC. T., R., M., OR BLOCK AND SURVEY OR AREA  
Sec. 20-T8S-R21E

12. COUNTY OR PARISH Utah 13. STATE UT

15. DATE SPudded 1/3/93 16. DATE T.D. REACHED 1/12/93 17. DATE COMPL. (Ready to prod.) 2/13/93 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\* 4697' KB 19. ELEV. CASINGHEAD 4683'

20. TOTAL DEPTH, MD & TVD 5378' 21. PLUG, BACK T.D., MD & TVD 5310' 22. IF MULTIPLE COMPL. HOW MANY\* 23. INTERVALS DRILLED BY → Rotary Tools All Cable Tools

24. PRODUCING INTERVAL(S) OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\* 5200-5210' G<sub>1</sub> Lime, Lower Green River 25. WAS DIRECTIONAL SURVEY MADE No

26. TYPE ELECTRIC AND OTHER LOGS RUN GR-Density-Neutron, -DIL-Sonic-CAL, GR-CCL-CBL *2-3-93 MUD LOG* 27. WAS WELL CORED No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8 5/8"	24	411'	12 1/4"	265 sx Class G	
5 1/2"	17	5373'	7 7/8"	520 sx Premium Plus AG & 120 sx 50-50 Pozmix	

29. LINER RECORD 30. TUBING RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 7/8"	5263'	

31. PERFORATION RECORD (Interval, size and number) 5200-5210' 4 JSPF, 90°, 19.5 gr.

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5200-5210'	20000 gal. 28% HCL

33. PRODUCTION

DATE FIRST PRODUCTION 2/13/93 PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Rod Pump WELL STATUS (Producing or shut-in) Producing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
2/15/93	24		→	350	TSTM	51	

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
		→	350	TSTM	51	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) TEST WITNESSED BY G. F. Beaman

35. LIST OF ATTACHMENTS

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

SIGNED *[Signature]* TITLE *Petroleum Engineer* DATE *2/25/93*

\*(See Instructions and Spaces for Additional Data on Reverse Side)

18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

37. SUMMARY OF POROUS ZONES: (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):

38. GEOLOGIC MARKERS

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP	
					MEAS. DEPTH	TRUE VERT. DEPTH
Uinta	Surface	2250'	Interbedded shale, sandstone & siltstone, occ. limestone, occ. blobs of oil			
Green River	2250'		Interbedded shale, siltstone, oil shale, sandstone & limestone. Blebs of oil are common	Mahogany Ledge	2673'	
			<u>Porous Interval</u> 5278-96' ostracodal grainstone, sandy i.p. oil stained, good strmg cut	Parachute Creek	4332'	
				G1 Lime	5278'	

OPERATOR Chevron U.S.A. Production Co.  
ADDRESS P. O. Box 455  
Vernal, UT 84078

OPERATOR ACCT. NO. H0210

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		
A	99999	11467	43-047-32304	Gypsum Hills 9	SENE	20	8S	21E	Uintah	01/03/93	

WELL 1 COMMENTS: 40 acre development well producing to individual tank battery.

*Entities added 3-24-93. See*

B	5265	→	43-047-32307	Wonsits Valley Fed. Unit 130	NWNW	22	8S	21E	Uintah	01/21/93	
---	------	---	--------------	------------------------------	------	----	----	-----	--------	----------	--

WELL 2 COMMENTS: 40 acre development well producing to central production facilities.

B	5265	→	43-047-32102	Wonsits Valley Fed. Unit 201	SWNE	15	8S	21E	Uintah	12/20/92	
---	------	---	--------------	------------------------------	------	----	----	-----	--------	----------	--

WELL 3 COMMENTS: 20 acre infill well producing to central production facilities.

B	5265	→	43-047-32308	Wonsits Valley Fed. Unit 202	NWSW	15	8S	21E	Uintah	12/12/92	
---	------	---	--------------	------------------------------	------	----	----	-----	--------	----------	--

WELL 4 COMMENTS: 20 acre infill well producing to central production facilities.

--	--	--	--	--	--	--	--	--	--	--	--

WELL 5 COMMENTS:

**ACTION CODES** (See instructions on back of form)  
 A - Establish new entity for new well (single)  
 B - Add new well to existing entity (group)  
 C - Re-assign well from one existing entity  
 D - Re-assign well from one existing entity  
 E - Other (explain in comments section)

NOTE: Use COMMENT section to explain why each Act

OIL AND GAS

RJF
1 FRM
SLS
GLH
DS
2 WEC
3 MICROFILM
4 FILE

*Chana Hough*  
 Signature  
 Operations Assistant 312  
 Title  
 Date  
 Phone No. 801.789-2442 Ext. 3

# Hang in There!!!

The Fax is on  
it's way!

TO: Lisha Cordova

CO: \_\_\_\_\_

FAX NO. (101) 359-3940 NO. OF PAGES FOLLOWING: 1

FROM: Lana Kough

CO: CUSA

FAX NO. 789-6732 TELEPHONE NO: 789-2442

Ext. 302





**Chevron U.S.A. Inc.**  
P.O. Box 455, Vernal, UT 84078 • Phone (801) 789-2442

**RECEIVED**

**MAR 24 1993**

**DIVISION OF  
OIL GAS & MINING**

March 22, 1993

State of Utah  
Department of Natural Resources  
Division of Oil, Gas and Mining  
355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, UT 84180-1203

Attn: Lisha Cordova

**Dear Lisha:**

Per your letter dated January 29, 1993, please find the entity action form attached for the following wells:

Gypsum Hills 9  
Wonsits Valley Federal Unit 130  
Wonsits Valley Federal Unit 201  
Wonsits Valley Federal Unit 202

If you have any questions or need further assistance, please contact me at (801) 789-2442 Ext. 302.

Sincerely,

**Lana Rough  
Operations Assistant**

llr

enclosure

OPERATOR Chevron U.S.A. Production Co.  
ADDRESS P. O. Box 455  
Vernal, UT 84078

OPERATOR ACCT. NO. N0210

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		
A	99999	11467	43-047-32304	Gypsum Hills 9	SENE	20	8S	21E	Uintah	01/03/93	
WELL 1 COMMENTS: 40 acre development well producing to individual tank battery. <i>Entities added 3-24-93 Lec</i>											
B	5265	→	43-047-32307	Wonsits Valley Fed. Unit 130	NWNW	22	8S	21E	Uintah	01/21/93	
WELL 2 COMMENTS: 40 acre development well producing to central production facilities.											
B	5265	→	43-047-32102	Wonsits Valley Fed. Unit 201	SWNE	15	8S	21E	Uintah	12/20/92	
WELL 3 COMMENTS: 20 acre infill well producing to central production facilities.											
B	5265	→	43-047-32308	Wonsits Valley Fed. Unit 202	NWSW	15	8S	21E	Uintah	12/12/92	
WELL 4 COMMENTS: 20 acre infill well producing to central production facilities.											
WELL 5 COMMENTS:											

ACTION CODES (See instructions on back of form)

- 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)

NOTE: Use COMMENT section to explain why each Action Code was selected.

(3/89)

**RECEIVED**

MAR 24 1993

DIVISION OF  
OIL GAS & MINING

*Jana Hough*  
Signature  
Operations Assistant 3/22/93  
Title Date  
Phone No. 801.789-2442 Ext. 302

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals

**SUBMIT IN TRIPLICATE**

1. Type of Well  
 Oil  Gas  
 Well  Well  Other

2. Name of Operator  
**Chevron U.S.A. Inc.**

3. Address and Telephone No.  
**P.O. Box 455, Vernal, Utah 84078 (801) 789-2442**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

**RECEIVED**

**MAR 26 1993**

**DIVISION OF  
OIL GAS & MINING**

5. Lease Designation and Serial No.  
**Various**

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation  
**Gypsum Hills Unit**

8. Well Name and No.  
**See Below**

9. API Well No.  
**43-047-32304**

10. Field and Pool, or Exploratory Area  
**Wonsits Valley-Grn. River**

11. County or Parish, State  
**Uintah, Utah**

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other <u>Install Anode Beds</u>
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

We propose to install casing cathodic protection anode beds as follows:

1. Drill 8" diameter holes 250' deep. Each hole will be loaded with 8-2.2" x 7' Anotec anodes and partially back filled with coke breeze.
2. Dig a 6" x 12" ditch to connect the anodes to the generator.

Proposed anode bed locations:

GH #9 2056' FNL, 663' FEL, SEC. 20-T8S-R21E  
 GH #10 2147' FSL, 2247' FEL, SEC. 21-T8S-R21E

ACCEPTED BY THE CHIEF  
 OPERATIONS DIVISION  
 BUREAU OF LAND MANAGEMENT  
 3-30-93  
 J. Matthews

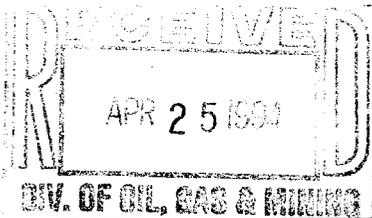
14. I hereby certify that the foregoing is true and correct

Signed Chana Rough Title Oper. Assistant Date 03/23/93

(This space for Federal or State office use)

Approved by: \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_

Conditions of approval, if any:



Memorandum GO-144

4-19 19 94

To Lusha  
From Susanne Paelebon (510) 827-7393

Subject: State Entity Number for Unit

Our File: #940425 Updated: jll

Your File:

Enclosed is a list of wells that are included in the unitized 'Gypsum Hills Unit.' I believe I've highlighted all the leases involved, with exception of API well #4304731932 which was not on the list.

I'd prefer entity #5355, but if it will work. Also we have it in our system as Gypsum Hills Field.

Please let me know when this is complete. I have informed the person who prepares the production/distribution reports of the forthcoming changes.

Call me if you have any questions.  
Thank you!  
Susanne

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

MONTHLY OIL AND GAS PRODUCTION REPORT

OPERATOR NAME AND ADDRESS:

ED OSWALD  
CHEVRON USA INC  
PO BOX J SEC 975  
CONCORD CA 94524

UTAH ACCOUNT NUMBER: N0210

REPORT PERIOD (MONTH/YEAR): 8 / 93

AMENDED REPORT  (Highlight Changes)

Well Name API Number	Entity	Location	Producing Zone	Well Status	Days Oper	Production Volumes		
						OIL(BBL)	GAS(MCF)	WATER(BBL)
RWU 219 (44-21C) 4304730149	05671	07S 24E 21	GRRV					
RWU 250 (41-29C) 4304730391	05671	07S 24E 29	MVRD					
UTAH STATE 1 4304715128	05878	07S 24E 36	GRRV					
STAGECOACH FEDERAL 23-21 4304731541	10005	08S 21E 21	GRRV					
BRENNAN FED 3 4304715419	10750	07S 21E 17	GRRV					
COSTAS FEDERAL 4-21-1C 4304731826	10826	08S 21E 21	GRRV					
COSTAS FEDERAL #5-21-2C 4304731827	10831	08S 21E 21	GRRV					
WVU 118 4304730596	10890	08S 21E 13	WSMVD					
GYPSUM HILLS 9 4304732304	11467	08S 21E 20	GRRV					
Gypsum Hills 10 4304732306	11469	08S 21E 21	DPL					
<del>BRENNAN FED 3-21-10</del> 4304731607	5367	8S 21E 21	GRRV	W/W				
4304731932	5355	8S 21E 20	GRRV	W/W				
<b>TOTALS</b>								

COMMENTS:

---



---

I hereby certify that this report is true and complete to the best of my knowledge.

Date: \_\_\_\_\_

Name and Signature: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

MONTHLY OIL AND GAS PRODUCTION REPORT

OPERATOR NAME AND ADDRESS:

ED OSWALD  
CHEVRON USA INC  
PO BOX J SEC 975  
CONCORD CA 94524

UTAH ACCOUNT NUMBER: N0210

REPORT PERIOD (MONTH/YEAR): 8 / 93

AMENDED REPORT  (Highlight Changes)

Well Name			Producing Zone	Well Status	Days Oper	Production Volumes		
API Number	Entity	Location				OIL(BBL)	GAS(MCF)	WATER(BBL)
<del>4304731006</del>	<del>05310</del>	<del>08S 21E 20</del>	GRRV					
<del>4304731066</del>	<del>05315</del>	<del>08S 21E 20</del>	GRRV					
<del>4304720002</del>	<del>05355</del>	<del>08S 21E 20</del>	GRRV					
4304730609	05395	10S 23E 16	WSMVD					
4304730879	05420	07S 21E 34	WSTC					
4304730600	05445	09S 21E 36	WSTC					
4304731065	05660	08S 21E 19	GRRV					
4304715135	05670	07S 23E 26	GRRV					
4304715136	05670	07S 23E 23	GRRV					
4304715137	05670	07S 23E 22	GRRV					
4304715138	05670	07S 23E 23	GRRV					
4304715139	05670	07S 23E 22	GRRV					
4304715140	05670	07S 23E 23	GRRV					
<b>TOTALS</b>								

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

hereby certify that this report is true and complete to the best of my knowledge.

Date: \_\_\_\_\_

Name and Signature: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

MONTHLY OIL AND GAS PRODUCTION REPORT

OPERATOR NAME AND ADDRESS:

ED OSWALD  
CHEVRON USA INC  
PO BOX J SEC 975  
CONCORD CA 94524

UTAH ACCOUNT NUMBER: N0210

REPORT PERIOD (MONTH/YEAR): 8 / 93

AMENDED REPORT  (Highlight Changes)

Well Name API Number	Entity	Location	Producing Zone	Well Status	Days Oper	Production Volumes		
						OIL(BBL)	GAS(MCF)	WATER(BBL)
RANGE CREEK FED #1 4301530113	00480	18S 16E 6	CDMTN					
STAGECOACH U 10-23 4304720163	04925	08S 21E 23	GRRV					
GYP SUM HILLS 4 4304730028	05250	08S 21E 19	GRRV					
GYP SUM HILLS 6 4304730099	05251	08S 21E 20	GRRV					
BRENNAN FED 1 4304715417	05260	07S 20E 13	GR-WS					
BRENNAN FED 6 4304730109	05261	07S 21E 19	GRRV					
WVU 6 4304715437	05265	08S 22E 7	GRRV					
WVU 14 4304715445	05265	08S 21E 12	GRRV					
WVU 24 4304715454	05265	08S 21E 1	GRRV					
WVU 34 4304715462	05265	08S 21E 11	GRRV					
WVU 35 4304715463	05265	08S 21E 14	GRRV					
WVU 39 4304715467	05265	08S 21E 11	GRRV					
WVU 42 4304715470	05265	08S 21E 11	GRRV					
<b>TOTALS</b>								

COMMENTS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I hereby certify that this report is true and complete to the best of my knowledge.

Date: \_\_\_\_\_

Name and Signature: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT**

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

**SUNDRY NOTICES AND REPORTS ON WELLS**  
Do not use this form for proposals to drill or to deepen or reentry to a different reservoir  
Use "APPLICATION FOR PERMIT--" for such proposals

**SUBMIT IN TRIPLICATE**

1. Type of Well  
Oil Gas  
 Well  Well  Other **MULTIPLE WELLS LIST ATTACHED**

2. Name of Operator  
**CHEVRON U.S.A. INC.**

3. Address and Telephone No.  
**11002 E. 17500 S. VERNAL, UT 84078-8526 (801) 781-4300**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

5. Lease Designation and Serial No.

6. If Indian, Allottee or Tribe Name  
**N/A**

7. If Unit or CA, Agreement Designation  
**GYPSUM HILLS UNIT  
UTU 67951A**

8. Well Name and No.

9. API Well No.

10. Field and Pool, or Exploratory Area  
**Gypsum Hills Unit**

11. County or Parish, State  
**UINTAH, UTAH**

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other <b>CHANGE OF OPERATOR</b>
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

(Note) Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work)

**As of January 1, 2000 Chevron U.S.A. Inc. resigns as Operator of the Gypsum Hills Unit.  
The Unit number is UTU 76951A effective April 1, 1991.**

**The successor operator under the Unit Agreement will be  
Shenandoah Energy Inc.  
475 17th Street, Suite 1000  
Denver, CO 80202**

Agreed and accepted to this 29th day of December, 1999

Shenandoah Energy Inc.  
By: Mitchell L. Solich  
Mitchell L. Solich  
President

**RECEIVED**

**DEC 30 1999**

DIVISION OF OIL, GAS & MINING

14. I hereby certify that the foregoing is true and correct.  
Signed A. E. Wacker A. E. Wacker Title Assistant Secretary Date 12/29/1999

(This space for Federal or State office use)

Approved by: \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_

Conditions of approval, if any \_\_\_\_\_

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office  
P.O. Box 45155  
Salt Lake City, UT 84145-0155

# RECEIVED

FEB 07 2000

DIVISION OF  
OIL, GAS AND MINING

IN REPLY REFER TO  
UT-931

February 4, 2000

Shenandoah Energy Inc.  
Attn: Rae Cusimano  
475 17<sup>th</sup> Street, Suite 1000  
Denver, Colorado 80202

Re: Gypsum Hills (Green River) Unit  
Uintah County, Utah

Gentlemen:

On December 30, 1999, we received an indenture whereby Chevron U.S.A. Inc. resigned as Unit Operator and Shenandoah Energy Inc. was designated as Successor Unit Operator for the Gypsum Hills (Green River) Unit, Uintah County, Utah.

This indenture was executed by all required parties and the signatory parties have complied with Sections 5 and 6 of the unit agreement. The instrument is hereby approved effective February 4, 2000. In approving this designation, the Authorized Officer neither warrants nor certifies that the designated party has obtained all required approval that would entitle it to conduct operations under the Gypsum Hills (Green River) Unit Agreement.

Your statewide (Utah) oil and gas bond No. 0969 will be used to cover all operations within the Gypsum Hills (Green River) Unit.

It is requested that you notify all interested parties of the change in unit operator. Copies of the approved instruments are being distributed to the appropriate federal offices, with one copy returned herewith.

Sincerely,

/s/ Robert A. Henricks

Robert A. Henricks  
Chief, Branch of Fluid Minerals

Enclosure

cc: Chevron U.S.A. Inc.

bcc: Field Manager - Vernal (w/enclosure)  
Division of Oil, Gas & Mining  
Minerals Adjudication Group U-932  
File - Gypsum Hills (Green River) Unit (w/enclosure)  
MMS - Data Management Division  
Agr. Sec. Chron  
Fluid Chron

UT931:TAThompson:tt:2/4/00

Well	Lease	API Number	Status	Type
COSTAS FEDERAL 1-20-4B	U-0140740	43-047-31006	A	INJ
COSTAS FEDERAL 2-20-3B	U-0140740	43-047-31066	A	INJ
COSTAS FEDERAL 3-21-1D	U-0804	43-047-31604	A	INJ
GYPSUM HILLS UNIT 10	U-025960	43-047-32306	A	INJ
GYPSUM HILLS UNIT 15	U-0140740	43-047-32648	A	INJ
GYPSUM HILLS UNIT 17	U-0140740	43-047-32649	A	INJ
GYPSUM HILLS UNIT 3	U-0140740	43-047-20002	A	INJ
GYPSUM HILLS UNIT 6	U-0140740	43-047-30099	A	INJ
GYPSUM HILLS UNIT 8-1 (SRU)	U-0140740	43-047-31932	A	INJ
GYPSUM HILLS UNIT 12	U-0140740	43-047-32458	A	INJ
COSTAS FEDERAL 4-21-1C	U-0804	43-047-31826	A	OIL
COSTAS FEDERAL 5-21-2C	U-0804	43-047-31827	A	OIL
GYPSUM HILLS 16	U-0140740	43-047-32675	A	OIL
GYPSUM HILLS UNIT 18	U-014740	43-047-32650	A	OIL
GYPSUM HILLS UNIT 4	U-0140740	43-047-30028	A	OIL
GYPSUM HILLS UNIT 9	U-0140740	43-047-32304	A	OIL
GYPSUM HILLS UNIT 11	U-0140740	43-047-32459	A	OIL
GYPSUM HILLS UNIT 13	U-0140740	43-047-32460	A	OIL
GYPSUM HILLS UNIT 14	U-0140740	43-047-32647	A	OIL
GYPSUM HILLS UNIT 19	U-0140740	43-047-32651	A	OIL
GYPSUM HILLS UNIT 20	U-0140740	43-047-32652	A	OIL
WHITON-FEDERAL 1-19-3C	U-0140740	43-047-31065	A	OIL
STAGECOACH 23-21	U-025960	43-047-31541	A	OIL
GYPSUM HILLS UNIT 21	U-0933	43-047-32692	A	GAS
GYPSUM HILLS 22 WG	U-0804	43-047-32818	A	GAS

**OPERATOR CHANGE WORKSHEET**

**ROUTING**

<del>1. [REDACTED]</del>	4-KAS ✓
2. CDW ✓	5- <del>SM</del> ✓
3. JLT	6-FILE

Enter date after each listed item is completed

**X Change of Operator (Well Sold)**

Designation of Agent

Operator Name Change (Only)

Merger

The operator of the well(s) listed below has changed, effective:

01/01/2000

**FROM:** (Old Operator):

CHEVRON USA INC

Address: 11002 E. 17500 S.

VERNAL, UT 84078-8526

Phone: 1-(435)-781-4300

Account No. N0210

**TO:** ( New Operator):

SHENANDOAH ENERGY INC

Address: 11002 E. 17500 S.

VERNAL, UT 84078

Phone: 1-(435)-781-4300

Account No. N4235

**CA No.**

**Unit: GYPSUM HILLS**

**WELL(S)**

NAME	API	ENTITY	SECTION	TOWNSHIP	RANGE	LEASE
GYPSUM HILLS UNIT 4	43-047-30028	5355	19	08S	21E	FEDERAL
WHITON FEDERAL 1-19-3C	43-047-31065	5355	19	08S	21E	FEDERAL
GYPSUM HILLS 16	43-047-32675	5355	20	08S	21E	FEDERAL
GYPSUM HILLS UNIT 18	43-047-32650	5355	20	08S	21E	FEDERAL
GYPSUM HILLS UNIT 9	<b>43-047-32304</b>	5355	20	08S	21E	FEDERAL
GYPSUM HILLS UNIT 11	43-047-32459	5355	20	08S	21E	FEDERAL
GYPSUM HILLS UNIT 14	43-047-32647	5355	20	08S	21E	FEDERAL
GYPSUM HILLS UNIT 19	43-047-32651	5355	20	08S	21E	FEDERAL
GYPSUM HILLS UNIT 20	43-047-32652	5355	20	08S	21E	FEDERAL
COSTAS FEDERAL 4-21-1C	43-047-31826	5355	21	08S	21E	FEDERAL
COSTAS FEDERAL 5-21-2C	43-047-31827	5355	21	08S	21E	FEDERAL
STAGECOACH 23-21	43-047-31541	5355	21	08S	21E	FEDERAL
GYPSUM HILLS UNIT 21	43-047-32692	5355	21	08S	21E	FEDERAL
GYPSUM HILLS UNIT 22 WG	43-047-32818	5355	22	08S	21E	FEDERAL

**OPERATOR CHANGES DOCUMENTATION**

1. (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 12/30/1999
2. (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 08/09/2000
3. The new company has been checked through the **Department of Commerce, Division of Corporations Database** on: 08/15/2000



May 28, 2003

Division of Oil, Gas, & Mining  
1594 West North Temple, Suite 1210  
P. O. Box 145801  
Salt Lake City, Utah 84114-5801

**Attention: John Baza/Jim Thompson**

Gentlemen:

This will serve as notice that through the internal corporate changes described below, activities formerly conducted in the name of either Shenandoah Operating Company, LLC (SOC) and/or Shenandoah Energy, Inc. (SEI) will hereafter be conducted in the name of QEP Uinta Basin, Inc.: i) the Shenandoah entities were purchased in July, 2001 by Questar Market Resources, Inc., which is a mid-level holding company for the non-utility businesses of Questar Corporation, ii) Shenandoah Operating Company, LLC has now been merged into Shenandoah Energy, Inc. (SEI), iii) Shenandoah Energy, Inc. has now been re-named **QEP Uinta Basin, Inc.** pursuant to a State of Delaware Amended and Restated Certificate of Incorporation, iv) the same employees will continue to be responsible for operations of the former SOC and SEI properties, both in the field and in the office. Accordingly, the change involves only an internal corporate name change and no third party change of operator is involved. Please alter your records to reflect the entity name change. Attached is a spreadsheet listing all wells affected by this change.

Should you have any questions, please call me at 303 - 308-3056.

Yours truly,



Frank Nielsen  
Division Landman

Enclosure

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JUN 02 2003

DIV. OF OIL, GAS & MINING

## SE (4235) to QEP (N2460) GYPSUM HILLS UNIT

well name	Sec	T	R	api	Entity	Lease Type	type	stat	
COSTAS FED 4-21-1C	21	080S	210E	4304731826	5355	Federal	OW	P	
COSTAS FED 5-21-2C	21	080S	210E	4304731827	5355	Federal	OW	P	
GHFU 10G-19-8-21	19	080S	210E	4304733566	5355	Federal	OW	P	
GYPSUM HILLS 11	20	080S	210E	4304732459	5355	Federal	OW	P	
GYPSUM HILLS 13	21	080S	210E	4304732460	5355	Federal	OW	P	
GYPSUM HILLS 14	20	080S	210E	4304732647	5355	Federal	OW	P	
GYPSUM HILLS 16	20	080S	210E	4304732675	5355	Federal	OW	P	
GYPSUM HILLS 18	20	080S	210E	4304732650	5355	Federal	OW	P	
GYPSUM HILLS 19	20	080S	210E	4304732651	5355	Federal	OW	P	
GYPSUM HILLS 20	20	080S	210E	4304732652	5355	Federal	OW	P	
GYPSUM HILLS 4	19	080S	210E	4304730028	5355	Federal	OW	P	
GYPSUM HILLS 9	20	080S	210E	4304732304	5355	Federal	OW	P	
STAGECOACH FED 23-21	21	080S	210E	4304731541	5355	Federal	OW	P	
WHITON FED 1-19-3C	19	080S	210E	4304731065	5355	Federal	OW	P	
COSTAS FED 1-20-4B	20	080S	210E	4304731006	5355	Federal	WI	A	
COSTAS FED 2-20-3B	20	080S	210E	4304731066	5355	Federal	WI	A	
COSTAS FED 3-21-1D	21	080S	210E	4304731604	5355	Federal	WI	A	
GYPSUM HILLS 10	21	080S	210E	4304732306	5355	Federal	WI	A	
GYPSUM HILLS 12	19	080S	210E	4304732458	5355	Federal	WI	A	
GYPSUM HILLS 15	20	080S	210E	4304732648	5355	Federal	WI	A	
GYPSUM HILLS 17	20	080S	210E	4304732649	5355	Federal	WI	A	
GYPSUM HILLS 3	20	080S	210E	4304720002	5355	Federal	WI	A	
GYPSUM HILLS 6	20	080S	210E	4304730099	5251	Federal	WI	A	
SRU 8-I	20	080S	210E	4304731932	5355	Federal	WI	A	



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office  
P.O. Box 45155  
Salt Lake City, UT 84145-0155

IN REPLY REFER TO  
UT-922

June 9, 2003

QEP Uinta Basin, Inc.  
1050 17<sup>th</sup> Street, Suite 500  
Denver, Colorado 80265

Re: Gypsum Hills (Green River) Unit  
Uintah County, Utah

Gentlemen:

On May 30, 2003, we received an indenture dated February 1, 2003, whereby Shenandoah Energy, Inc. changed its name and QEP Uinta Basin, Inc. was designated as Successor Unit Operator for the Gypsum Hills (Green River) Unit, Uintah County, Utah.

This indenture was executed by all required parties and the signatory parties have complied with Sections 5 and 6 of the unit agreement. The instrument is hereby approved effective June 9, 2003. In approving this designation, the Authorized Officer neither warrants nor certifies that the designated party has obtained all required approval that would entitle it to conduct operations under Gypsum Hills (Green River) Unit Agreement.

Your nationwide (Eastern States) oil and gas bond No. B000024 will be used to cover all operations within the Gypsum Hills (Green River) Unit.

It is requested that you notify all interested parties of the name change of unit operator. Copies of the approved instruments are being distributed to the appropriate federal offices, with one copy returned herewith.

Sincerely,

/s/ Robert A. Henricks

Robert A. Henricks  
Chief, Branch of Fluid Minerals

Enclosure

bcc: Field Manager - Vernal (w/enclosure)  
SITLA  
Division of Oil, Gas & Mining  
Minerals Adjudication Group  
File - Gypsum Hills (Green River) Unit (w/enclosure)  
Agr. Sec. Chron  
Fluid Chron

UT922:TAThompson:tt:6/9/03

**JUL 07 2003**

3104 (932.34)WF  
Nationwide Bond ESB000024

**NOTICE**

QEP Uinta Basin, Inc.	:	Oil and Gas
1050 17 <sup>th</sup> Street Suite 500	:	lease
Denver, Colorado 80265	:	

Name Change Recognized

Acceptable evidence has been filed in this office concerning the name change of Shenandoah Energy Incorporated into QEP Uinta Basin, Incorporated. QEP Uinta Basin, Incorporated is the surviving entity. This name change is recognized effective April 17, 2003.

Eastern States will notify the Minerals Management Service and all applicable Bureau of Land Management offices of the change by a copy of this notice.

If you identify other leases in which the merging entity maintain an interest, please contact this office and we will appropriately document those files with a copy of this notice.

If you have any questions, please contact Bill Forbes at 703-440-1536.

*S/ Wilbert B. Forbes*

Wilbert B. Forbes  
Land Law Examiner  
Branch of Use Authorization  
Division of Resources Planning,  
Use and Protection

bc: JFO,MMS, ES RF, 930 RF, 932.34 RF, E-932: wbf:07 /07/03:440-1536/ QEP Uinta Basin  
MFU

**OPERATOR CHANGE WORKSHEET**

**ROUTING**

- |         |
|---------|
| 1. GLH  |
| 2. CDW  |
| 3. FILE |

Change of Operator (Well Sold)

Designation of Agent/Operator

**X Operator Name Change**

Merger

The operator of the well(s) listed below has changed, effective:

**2/1/2003**

<b>FROM: (Old Operator):</b> N4235-Shenandoah Energy Inc 11002 E 17500 S Vernal, UT 84078-8526 Phone: (435) 781-4341	<b>TO: ( New Operator):</b> N2460-QEP Uinta Basin Inc 11002 E 17500 S Vernal, UT 84078-8526 Phone: (435) 781-4341
--	---

**CA No.**

**Unit:**

**GYPSUM HILLS (GREEN RIVER)**

**WELL(S)**

NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS	Confid
GHFU 10G-19-8-21	19	080S	210E	4304733566	5355	Federal	OW	P	
GYPSUM HILLS 4	19	080S	210E	4304730028	5355	Federal	OW	P	
WHITON FED 1-19-3C	19	080S	210E	4304731065	5355	Federal	OW	P	
GYPSUM HILLS 11	20	080S	210E	4304732459	5355	Federal	OW	P	
GYPSUM HILLS 14	20	080S	210E	4304732647	5355	Federal	OW	P	
GYPSUM HILLS 16	20	080S	210E	4304732675	5355	Federal	OW	P	
GYPSUM HILLS 18	20	080S	210E	4304732650	5355	Federal	OW	P	
GYPSUM HILLS 19	20	080S	210E	4304732651	5355	Federal	OW	P	
GYPSUM HILLS 20	20	080S	210E	4304732652	5355	Federal	OW	P	
<b>GYPSUM HILLS 9</b>	<b>20</b>	<b>080S</b>	<b>210E</b>	<b>4304732304</b>	5355	Federal	OW	P	
COSTAS FED 4-21-1C	21	080S	210E	4304731826	5355	Federal	OW	P	
COSTAS FED 5-21-2C	21	080S	210E	4304731827	5355	Federal	OW	P	
GYPSUM HILLS 13	21	080S	210E	4304732460	5355	Federal	OW	P	
STAGECOACH FED 23-21	21	080S	210E	4304731541	5355	Federal	OW	P	

**OPERATOR CHANGES DOCUMENTATION**

Enter date after each listed item is completed

- (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 6/2/2003
- (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 6/2/2003
- The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 6/19/2003
- Is the new operator registered in the State of Utah: YES Business Number: 5292864-0151
- If **NO**, the operator was contacted on: \_\_\_\_\_

6. (R649-9-2)Waste Management Plan has been received on:

IN PLACE

7. **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: 7/21/2003

8. **Federal and Indian Units:**

The BLM or BIA has approved the successor of unit operator for wells listed on: 7/21/2003

9. **Federal and Indian Communization Agreements ("CA"):**

The BLM or BIA has approved the operator for all wells listed within a CA on: n/a

10. **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: 8/28/2003

2. Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 8/28/2003

3. Bond information entered in RBDMS on: n/a

4. Fee wells attached to bond in RBDMS on: n/a

**STATE WELL(S) BOND VERIFICATION:**

1. State well(s) covered by Bond Number: 965-003-032

**FEDERAL WELL(S) BOND VERIFICATION:**

1. Federal well(s) covered by Bond Number: ESB000024

**INDIAN WELL(S) BOND VERIFICATION:**

1. Indian well(s) covered by Bond Number: 799446

**FEE WELL(S) BOND VERIFICATION:**

1. (R649-3-1) The **NEW** operator of any fee well(s) listed covered by Bond Number 965-003-033

2. The **FORMER** operator has requested a release of liability from their bond on: n/a

The Division sent response by letter on: n/a

**LEASE INTEREST OWNER NOTIFICATION:**

3. (R649-2-10) The **FORMER** 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:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Division of Oil, Gas and Mining**  
**OPERATOR CHANGE WORKSHEET**

**ROUTING**

1. DJJ
2. CDW

Change of Operator (Well Sold)

**X - Operator Name Change/Merger**

The operator of the well(s) listed below has changed, effective:

**1/1/2007**

**FROM: (Old Operator):**  
 N2460-QEP Uinta Basin, Inc.  
 1050 17th St, Suite 500  
 Denver, CO 80265

**TO: ( New Operator):**  
 N5085-Questar E&P Company  
 1050 17th St, Suite 500  
 Denver, CO 80265

Phone: 1 (303) 672-6900

Phone: 1 (303) 672-6900

**CA No.**

**Unit:**

**GYPSUM HILLS UNIT**

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

**OPERATOR CHANGES DOCUMENTATION**

Enter date after each listed item is completed

- (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 4/19/2007
- (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 4/16/2007
- The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 1/31/2005
- Is the new operator registered in the State of Utah: \_\_\_\_\_ Business Number: 764611-0143
- (R649-9-2) Waste Management Plan has been received on: IN PLACE
- Inspections of LA PA state/fee well sites complete on: n/a
- Reports current for Production/Disposition & Sundries on: n/a
- 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 4/23/2007 BIA
- Federal and Indian Units:**  
The BLM or BIA has approved the successor of unit operator for wells listed on: 4/23/2007
- Federal and Indian Communization Agreements ("CA"):**  
The BLM or BIA has approved the operator for all wells listed within a CA on: \_\_\_\_\_
- 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: \_\_\_\_\_

**DATA ENTRY:**

- Changes entered in the **Oil and Gas Database** on: 4/30/2007 and 5/15/2007
- Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 4/30/2007 and 5/15/2007
- Bond information entered in RBDMS on: 4/30/2007 and 5/15/2007
- Fee/State wells attached to bond in RBDMS on: 4/30/2007 and 5/15/2007
- Injection Projects to new operator in RBDMS on: 4/30/2007 and 5/15/2007
- Receipt of Acceptance of Drilling Procedures for APD/New on: n/a

**BOND VERIFICATION:**

- Federal well(s) covered by Bond Number: ESB000024
- Indian well(s) covered by Bond Number: 799446
- (R649-3-1) The **NEW** operator of any state/fee well(s) listed covered by Bond Number 965003033
- The **FORMER** operator has requested a release of liability from their bond on: n/a

**LEASE INTEREST OWNER NOTIFICATION:**

- (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: THIS IS A COMPANY NAME CHANGE.**

**SOME WELL NAMES HAVE BEEN CHANGED AS REQUESTED**

QEP Uinta Basin (N2460) to QUESTAR E and P (N5085)  
GYPSUM HILLS UNIT

4/30/2007 and 5/15/2007

Original Well Name	Well Name & No.	Q/Q	SEC	TWP	RNG	API	Entity	Lease	Well Type	Status
GYPSUM HILLS 3	GH 3	NENE	20	080S	210E	4304720002	5355	Federal	WI	A
GYPSUM HILLS 4	GH 4	SWSE	19	080S	210E	4304730028	5355	Federal	OW	P
GYPSUM HILLS 6	GH 6	NENW	20	080S	210E	4304730099	5251	Federal	WI	A
COSTAS FED 1-20-4B	GH 1-20	NESW	20	080S	210E	4304731006	5355	Federal	WI	A
WHITON FED 1-19-3C	GH 1-19	SESE	19	080S	210E	4304731065	5355	Federal	OW	P
COSTAS FED 2-20-3B	GH 2-20	NESE	20	080S	210E	4304731066	5355	Federal	WI	A
STAGECOACH FED 23-21	GH 23-21	NWSW	21	080S	210E	4304731541	5355	Federal	OW	P
COSTAS FED 3-21-1D	GH 3-21	SWNW	21	080S	210E	4304731604	5355	Federal	WI	A
COSTAS FED 4-21-1C	GH 4-21	SENE	21	080S	210E	4304731826	5355	Federal	OW	P
COSTAS FED 5-21-2C	GH 5-21	SENE	21	080S	210E	4304731827	5355	Federal	OW	P
SRU 8-I	GH 8-I	SWNE	20	080S	210E	4304731932	5355	Federal	WI	A
GYPSUM HILLS 9	GH 9	SENE	20	080S	210E	4304732304	5355	Federal	OW	P
GYPSUM HILLS 10	GH 10	NWSE	21	080S	210E	4304732306	5355	Federal	WI	A
GYPSUM HILLS 12	GH 12	NESE	19	080S	210E	4304732458	5355	Federal	WI	A
GYPSUM HILLS 11	GH 11	NWSE	20	080S	210E	4304732459	5355	Federal	OW	P
GYPSUM HILLS 13	GH 13	NESW	21	080S	210E	4304732460	5355	Federal	OW	P
GYPSUM HILLS 14	GH 13	NWSW	20	080S	210E	4304732647	5355	Federal	OW	P
GYPSUM HILLS 15	GH 15	SWSW	20	080S	210E	4304732648	5355	Federal	WI	A
GYPSUM HILLS 17	GH 17	SWSE	20	080S	210E	4304732649	5355	Federal	WI	A
GYPSUM HILLS 18	GH 18	SESE	20	080S	210E	4304732650	5355	Federal	OW	P
GYPSUM HILLS 19	GH 19	SWNW	20	080S	210E	4304732651	5355	Federal	OW	P
GYPSUM HILLS 20	GH 20	SENE	20	080S	210E	4304732652	5355	Federal	OW	P
GYPSUM HILLS 16	GH 16	SESW	20	080S	210E	4304732675	5355	Federal	OW	P
GHU 10W-19-8-21	GH 10W-19-8-21	NWSE	19	080S	210E	4304733528	12736	Federal	GW	P
GH 10G-19-8-21	GH 10G-19-8-21	NWSE	19	080S	210E	4304733566	5355	Federal	OW	P
WV 11W-17-8-21	WV 11W-17-8-20	NESW	17	080S	210E	4304733912	13228	Federal	GW	P
WV 5W-17-8-21	WV 5W-17-8-21	SWNW	17	080S	210E	4304733954	13332	Federal	GW	P
WV 7W-17-8-21	WV 7W-17-8-21	SWNE	17	080S	210E	4304733956	13330	Federal	GW	P
GH 9W-17-8-21	GH 9W-17-8-21	NESE	17	080S	210E	4304734150	13392	Federal	GW	P
GH 16W-17-8-21	GH 16W-17-8-21	SESE	17	080S	210E	4304734156	13354	Federal	GW	P
WV EXT 10W-17-8-21	WVX 10W-17-8-20	NWSE	17	080S	210E	4304734561	13744	Federal	GW	P
GH EXT 15W-17-8-21	GHX 15W-17-8-20	SWSE	17	080S	210E	4304734562	13674	Federal	GW	P
GYPSUM HILLS 13HG-17-8-21	GHX 13HG-17-8-21	SWSW	17	080S	210E	4304734723	5355	Federal	OW	S
GH 1G-17-8-21	GH 1G-17-8-21	NENE	17	080S	210E	4304734927	5355	Federal	OW	P
WV EXT 2W-17-8-21	WVX 2W-17-8-20	NWNE	17	080S	210E	4304734928	14253	Federal	GW	P
WV EXT 8W-17-8-21	WVX 8W-17-8-20	SENE	17	080S	210E	4304734929	13792	Federal	GW	P
GH 4MU-20-8-21	GH 4MU-20-8-21	NWNW	20	080S	210E	4304735068	14213	Federal	GW	P
GYPSUM HILLS 13MU-20-8-21	GH 13MU-20-8-20	SWSW	20	080S	210E	4304735070	14817	Federal	GW	P
GH 5W-20-8-21	GH 5W-20-8-21	SWNW	20	080S	210E	4304735097	14557	Federal	GW	P
WVX 3MU-17-8-21	WVX 3MU-17-8-21	NENW	17	080S	210E	4304735318	14113	Federal	GW	P
GH 15ML-18-8-21	GH 15ML-18-8-21	SWSE	18	080S	210E	4304735323	15483	Federal	GW	DRL

QEP Uinta Basin (N2460) to QUESTAR E and P (N5085)  
GYPSUM HILLS UNIT

4/30/2007 and 5/15/2007

Original Well Name	Well Name & No.	Q/Q	SEC	TWP	RNG	API	Entity	Lease	Well Type	Status
GH 1ML-19-8-21	GH 1ML-19-8-21	NENE	19	080S	210E	4304735324	14824	Federal	GW	P
GH 16W-19-8-21	GH 16W-19-8-21	SESE	19	080S	210E	4304735325	14823	Federal	GW	DRL
WVX 14MU-17-8-21	WVX 14MU-17-8-21	SESW	17	080S	210E	4304735369	14098	Federal	GW	P
WVX 12MU-17-8-21	WVX 12MU-17-8-21	NWSW	17	080S	210E	4304735370	15108	Federal	GW	P
WVX 8MU-19-8-21	WVX 8MU-19-8-21	SENE	19	080S	210E	4304735372	14241	Federal	GW	P
GH 10ML-18-8-21	GH 10ML-18-8-21	NWSE	18	080S	210E	4304735391	15482	Federal	GW	P
GH 8G-17-8-21	GH 8G-17-8-21	SENE	17	080S	210E	4304737992	5355	Federal	OW	DRL
GH 16G-17-8-21	GH 16G-17-8-21	SESE	17	080S	210E	4304737993	5355	Federal	OW	DRL
WVX 1MU-17-8-21	WVX 1MU-17-8-21	NENE	17	080S	210E	4304738156		Federal	GW	APD
GH 8MU-20-8-21	GH 8-20-8-21	SENE	20	080S	210E	4304738157		Federal	GW	APD
WVX 13MU-17-8-21	WVX 13MU-17-8-21	SWSW	17	080S	210E	4304738188		Federal	GW	APD
WVX 6MU-17-8-21	WVX 6MU-17-8-21	SENE	17	080S	210E	4304738189		Federal	GW	APD
WVX 4MU-17-8-21	WVX 4MU-17-8-21	NWNW	17	080S	210E	4304738190		Federal	GW	APD
WVX 16MU-18-8-21	WVX 16MU-18-8-21	SESE	18	080S	210E	4304738191		Federal	GW	APD
GH 2MU-19-8-21	GH 2MU-19-8-21	NWNE	19	080S	210E	4304738192		Federal	GW	APD
GH 3MU-19-8-21	GH 3MU-19-8-21	NENW	19	080S	210E	4304738250		Federal	GW	APD
GH 4MU-19-8-21	GH 4MU-19-8-21	NWNW	19	080S	210E	4304738264		Federal	GW	APD
GH 5MU-19-8-21	GH 5MU-19-8-21	SWNW	19	080S	210E	4304738265		Federal	GW	APD
GH 6MU-19-8-21	GH 6MU-19-8-21	SENE	19	080S	210E	4304738266		Federal	GW	APD
GH 7MU-19-8-21	GH 7D-19-8-21	SWNE	19	080S	210E	4304738267		Federal	GW	APD
GH 11MU-19-8-21	GH 11MU-19-8-21	NESW	19	080S	210E	4304738268		Federal	GW	APD
GH 12MU-19-8-21	GH 12MU-19-8-21	NWSW	19	080S	210E	4304738269		Federal	GW	APD
GH 15MU-19-8-21	GH 15MU-19-8-21	SWSE	19	080S	210E	4304738270		Federal	GW	APD
GH 14MU-19-8-21	GH 14MU-19-8-21	SESW	19	080S	210E	4304738472		Federal	GW	APD
WVX 1MU-18-8-21	WVX 1MU-18-8-21	NENE	18	080S	210E	4304738659		Federal	GW	APD
WVX 9MU-18-8-21	WVX 9MU-18-8-21	NESE	18	080S	210E	4304738660		Federal	GW	APD
WVX 8MU-18-8-21	GH 8G-18-8-21	SENE	18	080S	210E	4304738661		Federal	GW	APD
GH 6MU-20-8-21	GH 6-20-8-21	SENE	20	080S	210E	4304738662		Federal	GW	APD

**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.

<b>1. TYPE OF WELL</b> OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER: see attached
<b>2. NAME OF OPERATOR:</b> QUESTAR EXPLORATION AND PRODUCTION COMPANY		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: see attached
<b>3. ADDRESS OF OPERATOR:</b> 1050 17th Street Suite 500 CITY Denver STATE CO ZIP 80265		7. UNIT or CA AGREEMENT NAME: see attached
<b>4. LOCATION OF WELL</b> FOOTAGES AT SURFACE: attached COUNTY: Uintah		8. WELL NAME and NUMBER: see attached
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: STATE: UTAH		9. API NUMBER: attached
		10. FIELD AND POOL, OR WILDCAT:

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> (Submit in Duplicate)  Approximate date work will start: <u>1/1/2007</u>	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> (Submit Original Form Only)  Date of work completion: _____	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: <u>Operator Name Change</u>
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

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

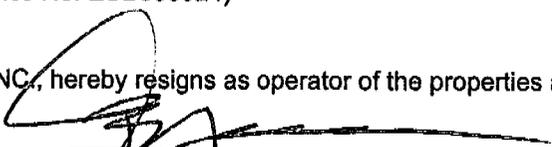
Effective January 1, 2007 operator of record, QEP Uinta Basin, Inc., will hereafter be known as QUESTAR EXPLORATION AND PRODUCTION COMPANY. This name change involves only an internal corporate name change and no third party change of operator is involved. The same employees will continue to be responsible for operations of the properties described on the attached list. All operations will continue to be covered by bond numbers:

Federal Bond Number: 965002976 (BLM Reference No. ESB000024)

Utah State Bond Number: 965003033

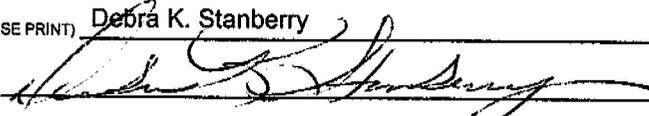
Fee Land Bond Number: 965003033

Current operator of record, QEP UINTA BASIN, INC., hereby resigns as operator of the properties as described on the attached list.

  
Jay B. Neese, Executive Vice President, QEP Uinta Basin, Inc.

Successor operator of record, QUESTAR EXPLORATION AND PRODUCTION COMPANY, hereby assumes all rights, duties and obligations as operator of the properties as described on the attached list

  
Jay B. Neese, Executive Vice President  
Questar Exploration and Production Company

NAME (PLEASE PRINT) <u>Debra K. Stanberry</u>	TITLE <u>Supervisor, Regulatory Affairs</u>
SIGNATURE 	DATE <u>3/16/2007</u>

(This space for State use only)

**RECEIVED**  
**APR 13 2007**

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

FORM 9

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

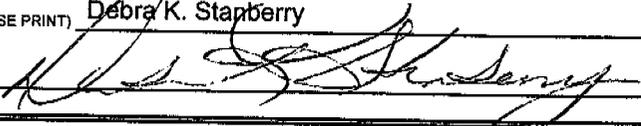
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER: see attached
2. NAME OF OPERATOR: QUESTAR EXPLORATION AND PRODUCTION COMPANY		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: see attached
3. ADDRESS OF OPERATOR: 1050 17th Street Suite 500 City: Denver STATE: CO ZIP: 80265		7. UNIT or CA AGREEMENT NAME: see attached
4. LOCATION OF WELL FOOTAGES AT SURFACE: attached		8. WELL NAME and NUMBER: see attached
PHONE NUMBER: (303) 308-3068		9. API NUMBER: attached
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:		10. FIELD AND POOL, OR WILDCAT:
COUNTY: Uintah		
STATE: UTAH		

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: <u>1/1/2007</u>	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion:	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: <u>Well Name Changes</u>
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

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

PER THE ATTACHED LIST OF WELLS, QUESTAR EXPLORATION AND PRODUCTION COMPANY REQUESTS THAT THE INDIVIDUAL WELL NAMES BE UPDATED IN YOUR RECORDS.

NAME (PLEASE PRINT) <u>Debra K. Stappberry</u>	TITLE <u>Supervisor, Regulatory Affairs</u>
SIGNATURE 	DATE <u>4/17/2007</u>

(This space for State use only)

RECEIVED

APR 19 2007

DIV. OF OIL, GAS & MINING



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office  
P.O. Box 45155  
Salt Lake City, UT 84145-0155



IN REPLY REFER TO  
3180  
UT-922

April 23, 2007

Questar Exploration and Production Company  
1050 17th Street, Suite 500  
Denver, Colorado 80265

Re: Gypsum Hills (GR) Unit  
Uintah County, Utah

Gentlemen:

On April 12, 2007, we received an indenture dated April 6, 2007, whereby QEP Uinta Basin, Inc. resigned as Unit Operator and Questar Exploration and Production Company was designated as Successor Unit Operator for the Gypsum Hills (GR) Unit, Uintah County, Utah.

This indenture was executed by all required parties and the signatory parties have complied with Sections 5 and 6 of the unit agreement. The instrument is hereby approved effective April 23, 2007. In approving this designation, the Authorized Officer neither warrants nor certifies that the designated party has obtained all required approval that would entitle it to conduct operations under the Gypsum Hills (GR) Unit Agreement.

Your nationwide oil and gas bond No. ESB000024 will be used to cover all federal operations within the Gypsum Hills (GR) Unit.

It is requested that you notify all interested parties of the change in unit operator. Copies of the approved instruments are being distributed to the appropriate federal offices, with one copy returned herewith.

Sincerely,

/s/ Greg J. Noble

Greg J. Noble  
Acting Chief, Branch of Fluid Minerals

### Enclosure

bcc: Field Manager - Vernal (w/enclosure)  
SITLA  
Division of Oil, Gas & Mining  
File - Gypsum Hills (GR) Unit (w/enclosure)  
Agr. Sec. Chron  
Reading File  
Central Files

UT922:TAThompson:tt:4/23/07

RECEIVED

APR 30 2007

DIV. OF OIL, GAS & MINING

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.*

5. Lease Serial No.  
UTU-0140740

6. If Indian, Allottee or Tribe Name  
UTE TRIBE

**SUBMIT IN TRIPLICATE** - Other instructions on page 2.

1. Type of Well  
 Oil Well     Gas Well     Other

7. If Unit of CA/Agreement, Name and/or No.  
GYPSUM HILLS UNIT

8. Well Name and No.  
GH 9

2. Name of Operator  
QUESTAR EXPLORATION & PRODUCTION CO.      CONTACT: JAN NELSON

9. API Well No.  
43-047-32304

3a. Address  
11002 EAST 17500 SOUTH, VERNAL, UTAH 84078

3b. Phone No. (include area code)  
(435) 781-4331

10. Field and Pool or Exploratory Area  
GYPSUM HILLS

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
2056' FNL 663' FEL, SECTION 20, T8S, R21E

11. Country or Parish, State  
UINTAH, UTAH

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <u>Re-Enter</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

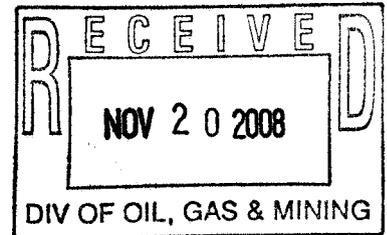
13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Questar Exploration & Production co. proposes to re-enter the GH 9 and drill a dual lateral horizontal oil well.

Bottom hole footages for Lateral 1 are 10' FNL 2450' FWL, Section 20, T8S, R21E  
Bottom hole footages for Lateral 2 are 1000' FSL 800' FWL, Section 21, T8S, R21E

- Please find attached:
1. Re-Entry Procedure      LAT#1 621130X
  2. Directional Drilling Plan      44413734
  3. 8-point Drilling Program      40.115844
  4. Proposed Well Bore Diagram
  5. Legal Plat / Map Prepared by UELS      -109.578598
  6. Location Layout referring to Reserve Pit

- LAT#2
- 622303X
  - 44406904
  - 40.104115
  - 109.565081



Should you need further technical information, Please contact our Drilling Engineer, Mama Sikes at (303) 308-3079.

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)

Laura Bills      Title Associate Regulatory Affairs Analyst

Signature *Laura Bills*      Date 11/20/2008

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by *Bradley G. Hill*      **BRADLEY G. HILL**      Date *12-02-08*

Conditions of approval, if any, are attached. Approval of this notice does not warrant that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

**Federal Approval of this Action is Necessary**

**CONFIDENTIAL**

# QUESTAR EXPLORATION AND PRODUCTION

## GHU 9

API: 43-047-32304

### Summarized Re-Entry Procedure

1. Rig down pumping unit, clear location of all unnecessary equipment.
2. MIRU pulling unit.
3. ND tubing head, NU BOP's (3M).
4. Kill well if necessary.
5. Pull out of hole with 208 rods (83 -  $\frac{7}{8}$ " plain, 90 -  $\frac{3}{4}$ " plain and 35 -  $\frac{3}{4}$ " scraped) and 2  $\frac{1}{2}$ " x 1  $\frac{3}{4}$ " x RHAC x 20 x 21 pump.
6. Unseat tubing anchor and POOH with 168 jts 2  $\frac{7}{8}$ " 6.5# J-55 tubing, PSN, 1 jt. 2  $\frac{7}{8}$ " 6.5# J-55 tubing, TAC, and pin notched collar.
7. PU bit and 5  $\frac{1}{2}$ " casing scraper, RIH to ~4,850'.
8. Roll hole with hot oiler, TOO H with bit and scraper.
9. RU wireline truck and RIH with CIBP.
10. Set top of CIBP @ +/- 4,783', 5' above nearest collar @ 4,788', POH.
11. ND BOP's
12. RD pulling unit, move off location.
13. MIRU drilling rig.
14. NU rig's 3,000 WP rated BOP.
15. RIH with whipstock, orient and set whipstock on top of CIBP set at 4,783' oriented at  $312^\circ \pm$  azimuth. If it is off a little, it is better to be less ( $< 312^\circ$ ) rather than greater ( $> 315^\circ$ ) due to the tendency for the bit to turn right as it comes out of the window. Plus or minus 2-3° is acceptable.
16. Shear setting pins and start milling operations, mill window in 5  $\frac{1}{2}$ " casing @ 4,771' top, 4,477' bottom and pilot hole. Work mills in and out of window several times.
17. TOO H, PU directional BHA and gyro tool, TIH.
18. Gyro steer the well at a  $312^\circ$  azimuth with 12.86°/100' build rates to 45 to 60 feet or until the MWD tools have cleared the casing and are providing accurate readings.
19. Pull gyro tool and continue to drill with directional equipment to land in the G1 Lime formation at a TVD of +/- 5,202' TVD, +/- 5,212' MD.
20. Drill +/- 2,500' of lateral in the G1 Lime with a  $1.7^\circ$  apparent down dip angle.

21. Circulate and condition hole, TOO, LD 3,180' of drill pipe.
  - a. PU 2,500' of 3 1/2" flush slotted liner, 691' of blank liner and liner dropping tool.
  - b. RIH w/ liner and dropping tool, drop liner at 4,772', just outside window.
  - c. TOO laying down remainder of the drill pipe.
22. RIH and set **top** of RBP @ +/- 4,705', 8' above nearest collar @ 4,713', POH.
23. RIH with whipstock, orient and set whipstock on top of RBP set at 4,705' oriented at  $147^{\circ} \pm$  azimuth. If it is off a little, it is better to be less ( $< 147^{\circ}$ ) rather than greater ( $> 150^{\circ}$ ) due to the tendency for the bit to turn right as it comes out of the window. Plus or minus 2-3 $^{\circ}$  is acceptable.
24. Shear setting pins and start milling operations, mill window in 5 1/2" casing @ 4,689' top, 4,695' bottom and pilot hole. Work mills in and out of window several times.
25. TOO, PU directional BHA and gyro tool, TIH.
26. Gyro steer the well at a  $147^{\circ}$  azimuth with 11.38 $^{\circ}$ /100' build rates to 50 to 100 feet or until the MWD tools have cleared the casing and are providing accurate readings.
27. Pull gyro tool and continue to drill with directional equipment to land in the G1 Lime formation at a TVD of +/- 5,189' TVD, +/- 5,395' MD.
28. Drill +/- 2,600' of lateral in the G1 Lime with a 1.4 $^{\circ}$  apparent up dip angle.
  - a. Mud system to be a weighted water based mud, weights are expected to be in the 8.8 – 9.8 ppg range.
29. Circulate and condition hole, TOO, LD 3,395' of drill pipe.
  - a. PU 2,600' of 3 1/2" flush slotted liner, 798' of blank liner and liner dropping tool.
  - b. RIH w/ liner and dropping tool, drop liner at 4,700', just outside window.
  - c. TOO.
30. RIH and set RBP @ +/- 4,600', 5' above nearest collar @ 4,595', POH.
31. ND BOP's.
32. RDMOL.

ONSHORE OIL & GAS ORDER NO. 1  
 QUESTAR EXPLORATION AND PRODUCTION, CO.  
 GHU 9 (Re-Entry Horizontal)

DRILLING PROGRAM

ONSHORE OIL & GAS ORDER NO. 1  
 Approval of Operations on Onshore  
 Federal Oil and Gas Leases

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil & Gas No. 1, and the approved plan of operations. The operator is fully responsible for the actions of its subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.

**1. Formation Tops**

The estimated top of important geologic markers are as follows:

Lateral #1:

<u>Formation</u>	<u>Depth, TVD</u>	<u>Depth, MD</u>
Green River	2,124'	2,124'
Kick Off Point	4,775'	4,777'
Green River (G1 Lime)	5,210'	5,377'
TD	5,295'	7,963'

Lateral #2:

<u>Formation</u>	<u>Depth, TVD</u>	<u>Depth, MD</u>
Green River	2,124'	2,124'
Kick Off Point	4,693'	4,695'
Green River (G1 Lime)	5,189'	5,395'
TD	5,133'	8,098'

**2. Anticipated Depths of Oil, Gas, Water, and Other Mineral Bearing Zones**

The estimated depths at which the top and bottom of the anticipated water, oil, gas, or other mineral bearing formations are expected to be encountered as follows:

Lateral #1 (ESE):

<u>Substance</u>	<u>Formation</u>	<u>Depth, TVD</u>	<u>Depth, MD</u>
Oil/Gas	Green River (G1 Lime)	5,210'	5,377' – 7,963'

Lateral #2 (WSW):

<u>Substance</u>	<u>Formation</u>	<u>Depth, TVD</u>	<u>Depth, MD</u>
Oil/Gas	Green River (G1 Lime)	5,189'	5,395' – 8,098'

All fresh water and prospectively valuable minerals encountered during drilling will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

ONSHORE OIL & GAS ORDER NO. 1  
 QUESTAR EXPLORATION AND PRODUCTION, CO.  
 GHU 9 (Re-Entry Horizontal)

All water shows and water-bearing sands will be reported to the BLM in Vernal, Utah. Copies of State of Utah form OGC-8-X are acceptable. If flows are detected, samples will be submitted to the BLM along with any water analyses conducted. Fresh water will be obtained from Wonsits Valley water right A36125 (which was filed on May 7, 1964) or Red Wash water right # 49-2153 (which was filed on March 25, 1960). It was determined by the Fish and Wildlife Service that any water right number filed before 1989 is not depleting to the Upper Colorado River System, to supply fresh water for drilling purposes. All water resulting from drilling operations will be disposed of at Red Wash Central Battery Disposal site; SWSE, Section 27, T7S, R23E or Wonsits Valley Disposal Site; SWNW, Section 12, T8S, R21E.

**3. Operator's Specification for Pressure Control Equipment**

- A. 3,000 psi double gate, 3,000 psi annular (schematic attached)
- B. Function test daily.
- C. All casing strings shall be pressure tested (0.22 psi/ft or 1,500 psi, whichever is greater) prior to drilling the plug after cementing; test pressure shall not exceed the internal yield of the casing.
- D. Ram type preventers and associated equipment shall be tested to rated working pressure if isolated by a test plug or to 50% of the internal yield pressure of casing, whichever is less. BOP and related equipment shall meet the minimum requirements of Onshore Oil & Gas Order No. 2 for equipment and testing requirements, procedures, etc..., for a 3M system and individual components shall be operable as designed.

**4. Casing Vertical Wellbore (Existing)**

Hole Size	Casing Size	Top, MD	Bottom, MD	Weight, lb/ft	Grade	Thread	Condition
12 1/4"	8 5/8"	sfc	411'	24.0	K-55	STC	New
7 7/8"	5 1/2"	sfc	5,378'	17.0	K-55	LTC	New

Casing Strengths:				Collapse	Burst	Tensile (minimum)
8 5/8"	24.0 lb.	K-55	STC	1,370 psi	2,950 psi	263,000 lb.
5 1/2"	17.0 lb.	K-55	LTC	4,910 psi	5,320 psi	272,000 lb.

The lateral portion of these wellbores will be cased with blank and slotted liners.

ONSHORE OIL & GAS ORDER NO. 1  
 QUESTAR EXPLORATION AND PRODUCTION, CO.  
 GHU 9 (Re-Entry Horizontal)

Lateral #1:

Hole Size	Casing Size	Top,MD	Bottom, MD	Weight	Grade	Mud Weight
4 ¾"	3 ½"	4,777'	7,963'	9.2	P-110	8.8-9.8

Lateral #2:

Hole Size	Casing Size	Top,MD	Bottom, MD	Weight	Grade	Mud Weight
4 ¾"	3 ½"	4,695'	8,098'	9.2	P-110	8.8-9.8

Please refer to the wellbore diagram and re-entry procedure for further details.

**MINIMUM DESIGN FACTORS:**

COLLAPSE: 1.125  
 BURST: 1.10  
 TENSION: 1.80

Area Fracture Gradient: 0.6 psi/foot  
 Maximum anticipated mud weight: 9.8 ppg  
 Maximum surface treating pressure: 4,000 psi

**5. Cementing Program**

Casing in the vertical wellbore already exists and is cemented in place requiring no cement.

**Lateral #1: 3 ½" Slotted & Blank Liner: 4,782' – 9,963' (MD)**  
 No cement, dropped in open hole.

**Lateral #2: 3 ½" Slotted & Blank Liner: 4,700' – 8,098' (MD)**  
 No cement, dropped in open hole.

**6. Auxilliary Equipment**

- A. Kelly Cock – Yes
- B. Float at the bit – No
- C. Monitoring equipment on the mud system – visually and/or PVT or Flow Show
- D. Fully opening safety valve on the rig floor – Yes
- E. Rotating Head – Yes

ONSHORE OIL & GAS ORDER NO. 1  
QUESTAR EXPLORATION AND PRODUCTION, CO.  
GHU 9 (Re-Entry Horizontal)

Drilling the surface hole with air:

A variance from 43 CFR 3160 Onshore Oil and Gas Order #2, Section III requirements, subsection E Special Drilling Operations is requested for the specific operation of drilling and setting surface casing on the subject well with a truck mounted air rig. The variance from the following requirements of Order #2 is requested because surface casing depth for this well is less than 500 feet and high pressures are not expected.

- a. **Properly lubricated and maintained rotating head.** A diverter system in place of a rotating head. The diverter system forces the air and cutting returns to the reserve pit and is used to drill the surface casing.
- b. **Blooie line discharge 100' from well bore and securely anchored.** The blooie line discharge for this operation will be located 50 to 70 feet from the wellhead. This reduced length is necessary due to the smaller location size to minimize surface disturbance.
- c. **Automatic ignitor or continuous pilot light on the blooie line.** A diffuser will be used rather than an automatic pilot/ignitor. Water is injected into the compressed air and eliminates the need for the pilot light and the need for dust suppression equipment.
- d. **Compressors located in the opposite direction from the blooie line a minimum of 100 feet from the well bore.** Compressors located 50 feet on the opposite side of the well bore from the blooie line and is equipped with a 1) emergency kill switch on the driller's console, 2) pressure relief valve on the compressor, 3) spark arrestors on the motors.
- e. **Deflector on the end of the blooie line** – Questar will mount a deflector unit at the end of the blooie line for the purpose of changing the direction and velocity of the air and cuttings flow into the reserve pit. Changing the velocity and direction of the cuttings and air will preserve the pit liner. In the event the deflector washes out due to erosion caused by the sand blasting effect of the cuttings, there will be no problem because the deflector is mounted on the very end of the blooie. A washed out deflector will be easily replaced.
- g. **Flare Pit** – there will be no need of a flare pit during the surface hole air drilling operation because the blooie line is routed directly to the reserve pit. When the big rig arrives for the main drilling after setting surface casing, all flare lines will be routed to the flare pit.

Drilling of the lateral will be done with fresh water based mud systems consisting primarily of fresh water, bentonite, lignite, caustic, lime, soda ash, and polymers. No chromates will be used. It is not intended to use oil in the mud, however, in the event it is used the concentration will be less than 4% by volume. Maximum anticipated mud weight is 9.8 ppg.

ONSHORE OIL & GAS ORDER NO. 1  
QUESTAR EXPLORATION AND PRODUCTION, CO.  
GHU 9 (Re-Entry Horizontal)

No minimum quantity of weight material will be required to be kept on location.

PVT/Flow show will be used upon exit of existing production casing to TD.

Gas detector will be used upon exit of existing production casing to TD.

**7. Testing, Logging, and Coring Program**

A. Cores – None Anticipated

B. DST – None Anticipated

C. Logging:

i. Mud logging from casing exit to TD

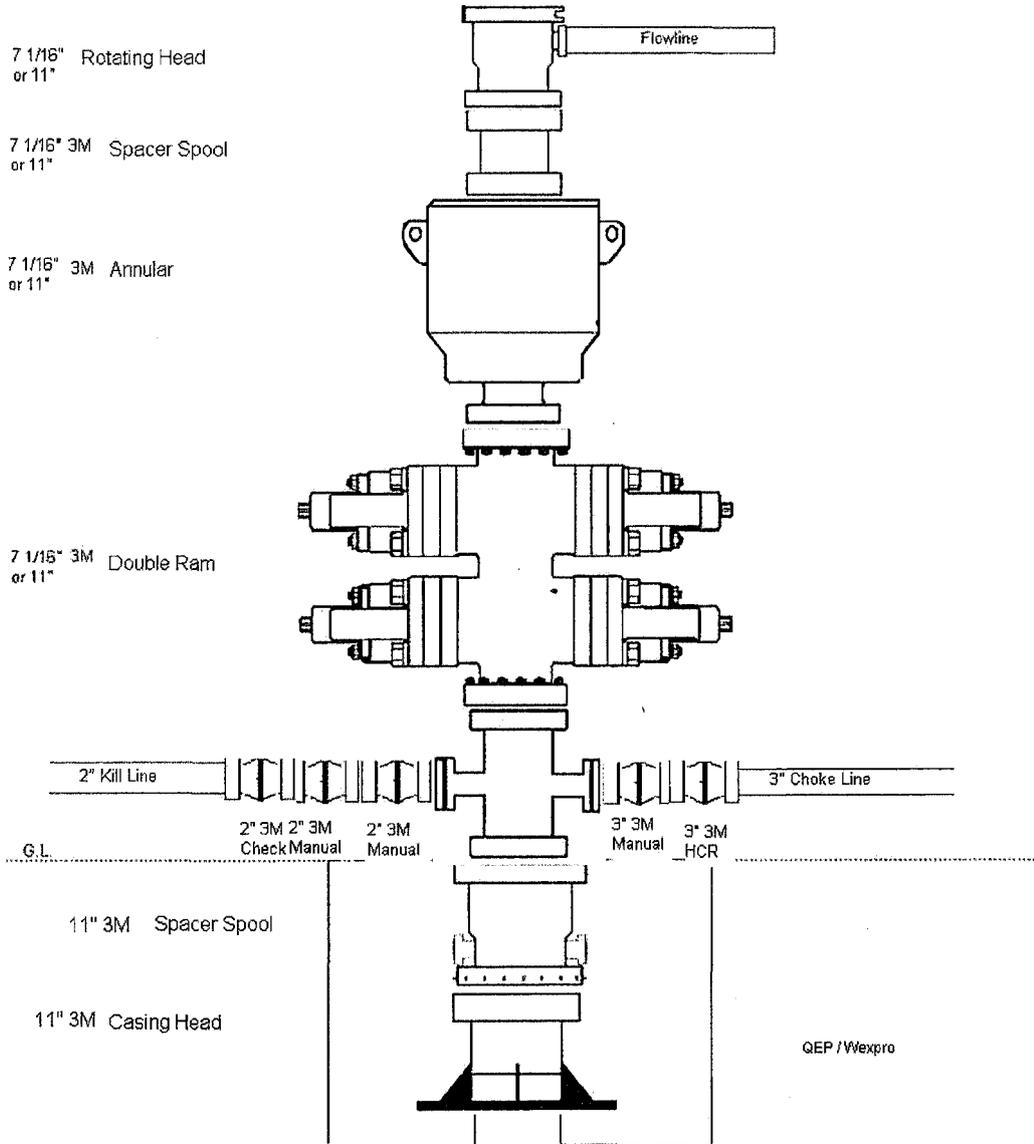
ii. MWD-GR will be utilized during drilling operations to aid in landing the curve and maintaining the lateral within the desired zone.

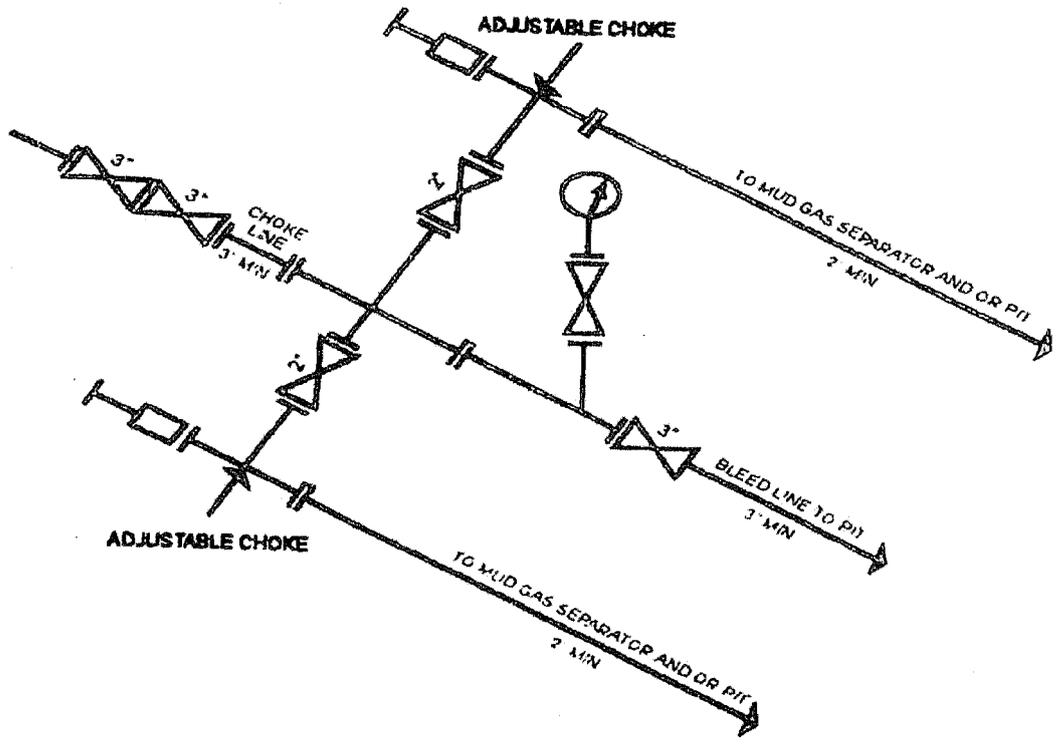
D. Formation and completion interval: G1 Lime interval, final determination of completion will be made by analysis of mud logging data. Stimulation: stimulation will be designed for the particular area of interest encountered.

**8. Anticipated Abnormal Pressures and Temperatures, Other Potential Hazards**

No abnormal temperatures or pressures are anticipated. No H<sub>2</sub>S has been encountered or is known to exist from previous wells drilled to similar depths in the general area. Maximum anticipated bottom-hole pressure equals approximately 3,455 psi. Maximum anticipated bottom hole temperature is approximately 150°F.

ONSHORE OIL & GAS ORDER NO. 1  
 QUESTAR EXPLORATION & PRODUCTION COMPANY  
 GH 9 RE-ENTRY





**3M CHOKE MANIFOLD EQUIPMENT - CONFIGURATION OF CHOKES MAY VARY**  
 [54 FR 39528, Sept. 27, 1989]

# GHU 9 - Lateral #1 Drilling Plan 11-13-08 Proposal

<b>Report Date:</b> November 19, 2008 <b>Client:</b> <b>Field:</b> Uinta <b>Structure / Slot:</b> Gypsum Hills / GHU 9 <b>Well:</b> GHU 9 <b>Borehole:</b> Lateral 1(est RKB) <b>UWI/API#:</b> <b>Survey Name / Date:</b> GHU 9 - Lateral #1 Drilling Plan 11-13-08 / November 13, 2008 <b>Tort / AHD / DDI / ERD ratio:</b> 97.800° / 3023.17 ft / 5.648 / 0.571 <b>Grid Coordinate System:</b> NAD83 Utah State Planes, Central Zone, US Feet <b>Location Lat/Long:</b> N 40 6 36.734, W 109 34 16.502 <b>Location Grid N/E Y/X:</b> N 7214682.068 RUS, E 2179821.077 RUS <b>Grid Convergence Angle:</b> +1.23551567° <b>Grid Scale Factor:</b> 0.99991033	<b>Survey / DLS Computation Method:</b> Minimum Curvature / Lubinski <b>Vertical Section Azimuth:</b> 311.020° <b>Vertical Section Origin:</b> N 0.000 ft, E 0.000 ft <b>TVD Reference Datum:</b> KB <b>TVD Reference Elevation:</b> 4699.0 ft relative to MSL <b>Sea Bed / Ground Level Elevation:</b> 4718.000 ft relative to MSL <b>Magnetic Declination:</b> 11.439° <b>Total Field Strength:</b> 52664.719 nT <b>Magnetic Dip:</b> 66.019° <b>Declination Date:</b> November 13, 2008 <b>Magnetic Declination Model:</b> IGRF 2005 <b>North Reference:</b> True North <b>Total Corr Mag North -&gt; True North:</b> +11.439° <b>Local Coordinates Referenced To:</b> Well Head
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Comments	Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Vertical Section (ft)	NS (ft)	EW (ft)	Closure (ft)	Closure Azimuth (deg)	DLS (deg/100 ft)	Tool Face (deg)	Northing (RUS)	Eastings (RUS)
Tie-In	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	164.00M	7214682.07	2179821.08
	407.00	1.00	164.00	406.98	-2.98	-3.41	0.98	3.55	164.00	0.25	164.00M	7214678.68	2179822.13
	898.00	0.50	164.00	897.94	-8.37	-9.59	2.75	9.98	164.00	0.10	164.00M	7214672.54	2179824.03
	1389.00	0.75	164.00	1388.91	-12.86	-14.74	4.23	15.33	164.00	0.05	164.00M	7214667.42	2179825.62
	1853.00	0.25	164.00	1852.89	-16.26	-18.63	5.34	19.38	164.00	0.11	164.00M	7214663.56	2179826.82
	2381.00	1.75	164.00	2380.79	-23.99	-27.49	7.88	28.60	164.00	0.28	164.00M	7214654.76	2179829.55
	2567.00	3.50	164.00	2566.59	-31.14	-35.68	10.23	37.12	164.00	0.94	164.00M	7214646.62	2179832.07
	2663.00	3.25	164.00	2662.42	-35.88	-41.11	11.79	42.77	164.00	0.26	164.00M	7214641.22	2179833.75
	2754.00	2.50	164.00	2753.31	-39.71	-45.50	13.05	47.33	164.00	0.82	164.00M	7214636.87	2179835.10
	2846.00	2.00	164.00	2845.24	-42.74	-48.97	14.04	50.94	164.00	0.54	164.00M	7214633.42	2179836.17
	3094.00	1.25	164.00	3093.13	-48.63	-55.73	15.98	57.98	164.00	0.30	164.00M	7214626.70	2179838.25
	3622.00	1.50	164.00	3620.98	-59.26	-67.91	19.47	70.65	164.00	0.05	164.00M	7214614.60	2179842.01
	3897.00	1.50	164.00	3895.89	-65.30	-74.83	21.46	77.85	164.00	0.00	164.00M	7214607.73	2179844.14
Tie-In to Original Hole	4395.00	1.00	164.00	4393.77	-74.41	-85.27	24.45	88.71	164.00	0.10	-48.00M	7214597.35	2179847.36
	4776.00	0.00	312.00	4774.75	-77.20	-88.47	25.37	92.03	164.00	0.26	-48.00M	7214594.17	2179848.34
KOP-Build 12.86/100ft	4777.00	0.00	312.00	4775.75	-77.20	-88.47	25.37	92.03	164.00	0.00	-48.00M	7214594.17	2179848.34
G1 Lime Top	5376.62	77.13	312.00	5210.00	268.95	143.19	-231.91	272.55	301.69	12.86	0.00G	7214820.21	2179586.15
Hold 312 azm	5463.49	88.30	312.00	5221.00	354.97	200.75	-295.84	357.53	304.16	12.86	0.00G	7214876.38	2179521.00
PBHL/TD	7963.49	88.30	312.00	5295.17	2853.50	1872.84	-2152.89	2853.50	311.02	0.00	0.00G	7216507.89	2177628.51

**Survey Type:** Non-Def Proposal

**Survey Error Model:** SLB ISCWSA version 22 \*\*\* 3-D 95.00% Confidence 2.7955 sigma

**Surveying Prog:**

MD From (ft)	MD To (ft)	EOU Freq	Survey Tool Type
-19.00	0.00	Act-Stns	SLB_UNKNOWN (default tool used)
0.00	4000.00	Act-Stns	SLB_PHOTO-MSS
4000.00	4395.00	1/100.00	SLB_PHOTO-MSS
4395.00	7963.49	1/100.00	SLB_MWD-STD

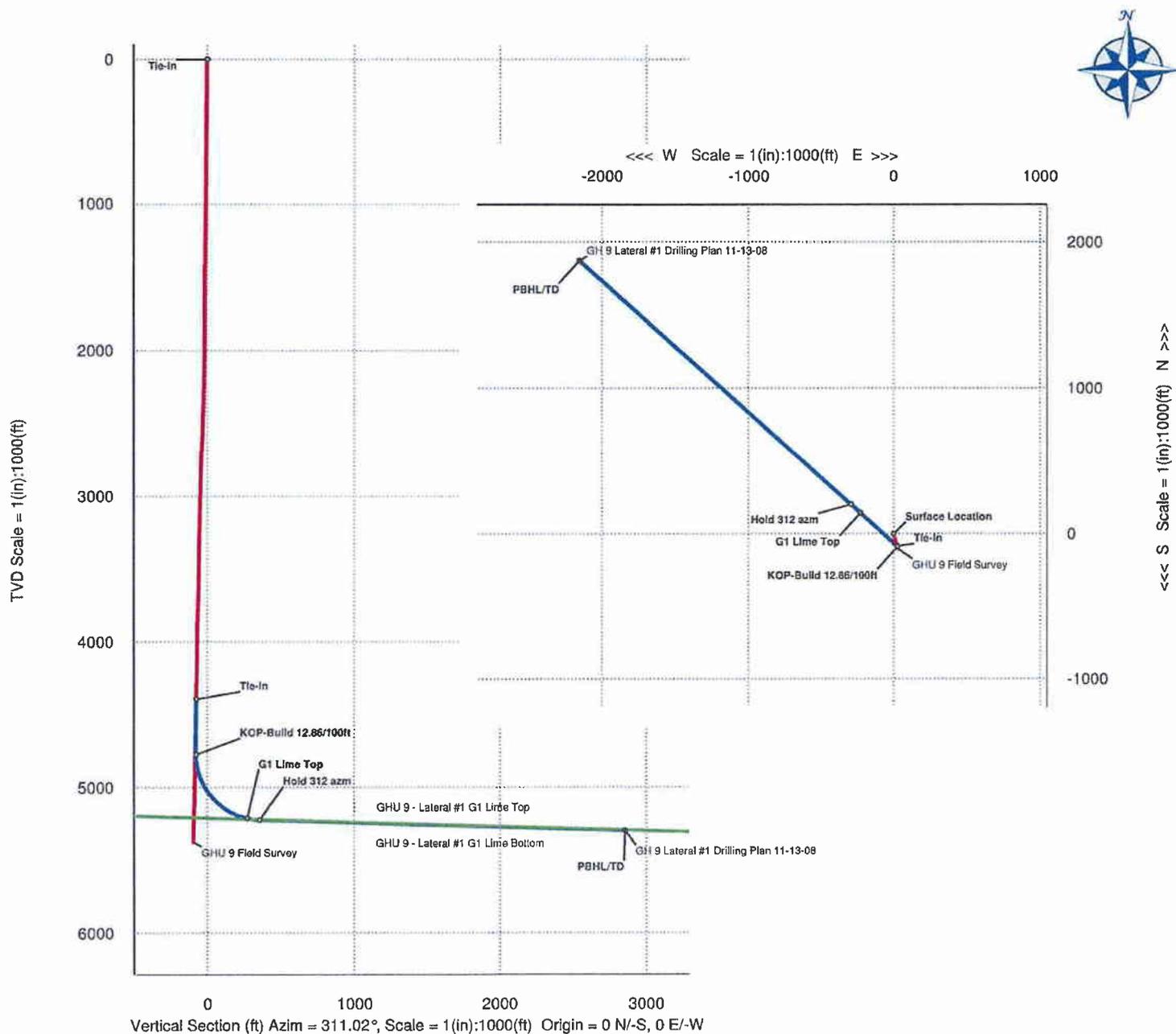
**Borehole -> Survey**

Original Hole -> GHU 9 Field Survey  
 Original Hole -> GHU 9 Field Survey  
 Original Hole -> GHU 9 Field Survey  
 Lateral 1(est RKB) -> GHU 9 - Lateral #1 Drilling Plan 11-13-08

# QUESTAR

WELL <b>GHU 9 - Lateral #1 Plan</b>	FIELD <b>Uinta</b>	STRUCTURE <b>Gypsum Hills</b>
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Magnetic Parameters Model: IGRF 2005 Dip: 68.019° Mag Dec: +11.439°	Date: November 13, 2008 FS: 52664.7 nT	Surface Location Lat: N40 5 36.734 Lon: W109 34 18.502	NAD83 Utah State Plane, Central Zone, US Feet Northing: 7214082.07 RUS Easting: 2179821.08 RUS Grid Conv: +1.2351567° Scale Fact: 0.998910227	Miscellaneous Slot: GH 9 Plan: GH 9 Lateral #1 Drilling Plan 11-13-08	TVD Ref: KB (4589.00 ft above MSL) November 19, 2008
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## Legend

<span style="color: blue;">—</span>	GH 9 Lateral #1 Drilling Plan 11-13-08
<span style="color: red;">—</span>	GHU 9 Field Survey
<span style="color: green;">—</span>	GHU 9 - Lateral #1 G1 Lime Top
<span style="color: blue;">—</span>	GHU 9 - Lateral #1 G1 Lime Bottom

Critical Point	MD	INCL	ΔZIM	TVD	VSEC	N(±)/S(±)	E(±)/W(±)	DLS
Tie-In	4395.00	1.00	164.00	4393.77	-74.41	-85.27	24.45	
KOP-Build 12.86/100ft	4777.00	0.00	312.00	4775.75	-77.20	-88.47	25.37	0.00
G1 Lime Top	5376.62	77.13	312.00	5210.00	268.95	143.19	-231.91	12.86
Hold 312 azm	5463.49	88.30	312.00	5221.00	354.97	200.75	-295.84	12.86
PBHL/TD	7963.49	88.30	312.00	5295.17	2853.50	1872.84	-2152.89	0.00



True North  
 Tot Corr (M->T  
 +11.4390°)  
 Mag Dec (+11.439°)  
 Grid Conv  
 (+1.2351567°)

Quality Control  
 Date Dwn: Wed 03:30  
 PM November 19, 2008  
 Drawn by: Current User

# GHU 9 - Lateral #2 Drilling Plan 11-13-08 Proposal

<b>Report Date:</b> November 19, 2008 <b>Client:</b> <b>Field:</b> Uinta <b>Structure / Slot:</b> Gypsum Hills / GHU 9 <b>Well:</b> GHU 9 <b>Borehole:</b> Lateral 2(est RKB) <b>UWI/API#:</b> <b>Survey Name / Date:</b> GHU 9 - Lateral #2 Drilling Plan 11-13-08 / November 19, 2008 <b>Tort / AHD / DDI / ERD ratio:</b> 100.900° / 3206.24 ft / 5.703 / 0.617 <b>Grid Coordinate System:</b> NAD83 Utah State Planes, Central Zone, US Feet <b>Location Lat/Long:</b> N 40 6 36.734, W 109 34 16.502 <b>Location Grid N/E Y/X:</b> N 7214682.068 ftUS, E 2179821.077 ftUS <b>Grid Convergence Angle:</b> +1.23551567° <b>Grid Scale Factor:</b> 0.99991033	<b>Survey / DLS Computation Method:</b> Minimum Curvature / Lubinski <b>Vertical Section Azimuth:</b> 147.480° <b>Vertical Section Origin:</b> N 0.000 ft, E 0.000 ft <b>TVD Reference Datum:</b> KB <b>TVD Reference Elevation:</b> 4699.0 ft relative to MSL <b>Sea Bed / Ground Level Elevation:</b> 4718.000 ft relative to MSL <b>Magnetic Declination:</b> 11.439° <b>Total Field Strength:</b> 52664.719 nT <b>Magnetic Dip:</b> 66.019° <b>Declination Date:</b> November 13, 2008 <b>Magnetic Declination Model:</b> IGRF 2005 <b>North Reference:</b> True North <b>Total Corr Mag North -&gt; True North:</b> +11.439° <b>Local Coordinates Referenced To:</b> Well Head
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Comments	Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Vertical Section (ft)	NS (ft)	EW (ft)	Closure (ft)	Closure Azimuth (deg)	DLS (deg/100 ft)	Tool Face (deg)	Northing (ftUS)	Eastings (ftUS)
Tie-In	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	164.00M	7214682.07	2179821.08
	407.00	1.00	164.00	406.98	3.41	-3.41	0.98	3.55	164.00	0.25	164.00M	7214678.68	2179822.13
	898.00	0.50	164.00	897.94	9.57	-9.59	2.75	9.98	164.00	0.10	164.00M	7214672.54	2179824.03
	1389.00	0.75	164.00	1388.91	14.70	-14.74	4.23	15.33	164.00	0.05	164.00M	7214667.42	2179825.62
	1853.00	0.25	164.00	1852.89	18.58	-18.63	5.34	19.38	164.00	0.11	164.00M	7214663.56	2179826.82
	2381.00	1.75	164.00	2380.79	27.42	-27.49	7.88	28.60	164.00	0.28	164.00M	7214654.76	2179829.55
	2567.00	3.50	164.00	2566.59	35.58	-35.68	10.23	37.12	164.00	0.94	164.00M	7214646.62	2179832.07
	2663.00	3.25	164.00	2662.42	41.00	-41.11	11.79	42.77	164.00	0.26	164.00M	7214641.22	2179833.75
	2754.00	2.50	164.00	2753.31	45.38	-45.50	13.05	47.33	164.00	0.82	164.00M	7214636.87	2179835.10
	2846.00	2.00	164.00	2845.24	48.84	-48.97	14.04	50.94	164.00	0.54	164.00M	7214633.42	2179836.17
	3094.00	1.25	164.00	3093.13	55.58	-55.73	15.98	57.98	164.00	0.30	164.00M	7214626.70	2179838.25
	3622.00	1.50	164.00	3620.98	67.73	-67.91	19.47	70.65	164.00	0.05	164.00M	7214614.60	2179842.01
	3897.00	1.50	164.00	3895.89	74.63	-74.83	21.46	77.85	164.00	0.00	164.00M	7214607.73	2179844.14
Tie-In to Original Hole	4395.00	1.00	164.00	4393.77	85.05	-85.27	24.45	88.71	164.00	0.10	147.00M	7214597.35	2179847.36
	4694.00	0.00	147.00	4692.75	87.55	-87.78	25.17	91.32	164.00	0.33	147.00M	7214594.86	2179848.13
KOP-Build 11.38/100ft	4695.00	0.00	147.00	4693.75	87.55	-87.78	25.17	91.32	164.00	0.00	147.00M	7214594.86	2179848.13
G1 Lime Top	5395.03	79.68	147.00	5189.00	500.71	-434.30	250.20	501.22	150.05	11.38	0.00G	7214253.30	2180080.56
Hold 147 azm	5498.04	91.40	147.00	5197.00	603.23	-520.28	306.04	603.62	149.54	11.38	0.00G	7214168.55	2180138.23
PBHL/TD	8098.04	91.40	147.00	5133.48	3202.36	-2700.17	1721.68	3202.36	147.48	0.00	0.00G	7212019.89	2181600.41

**Survey Type:** Non-Def Proposal

**Survey Error Model:** SLB ISCWSA version 22 \*\*\* 3-D 95.00% Confidence 2.7955 sigma

**Surveying Prog:**

**MD From (ft)**

**MD To (ft)**

**EOU Freq**

**Survey Tool Type**

**Borehole -> Survey**

-19.00

0.00

Act-Stns SLB\_UNKNOWN (default tool used)

Original Hole -> GHU 9 Field Survey

0.00

4000.00

Act-Stns SLB\_PHOTO-MSS

Original Hole -> GHU 9 Field Survey

4000.00

4395.00

1/100.00 SLB\_PHOTO-MSS

Original Hole -> GHU 9 Field Survey

4395.00

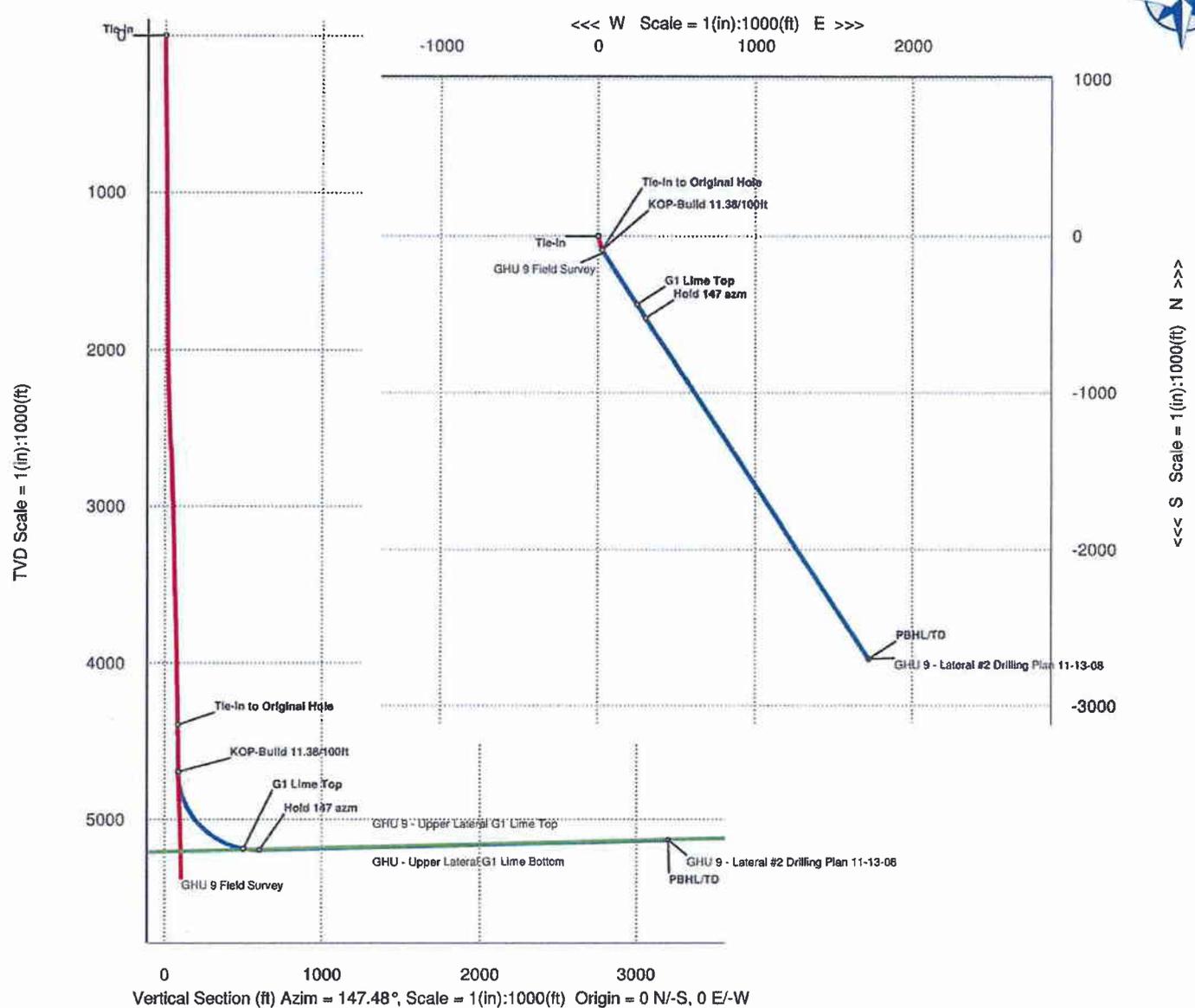
8098.04

1/100.00 SLB\_MWD-STD

Lateral 2(est RKB) -> GHU 9 - Lateral #2 Drilling Plan 11-13-08

# QUESTAR

<b>WELL</b> GHU 9 Lateral #2 Plan	<b>FIELD</b> Uinta	<b>STRUCTURE</b> Gypsum Hills
<b>Magnetic Parameters</b> Model: IGRF 2005 Dip: 05.019° Mag Dec: +11.439°	<b>Date:</b> November 13, 2008 <b>FS:</b> 52654.7 nT	<b>Surface Location</b> Lat: N40 8 38.734 Lon: W109 34 16.502
<b>NAD83 Utah State Plane, Central Zone, US Feet</b> Northing: 7214692.07 NUS Easting: 2179831.04 NUS Grid Conv: +1.23251597* Scale Factor: 0.999916327		<b>Miscellaneous</b> Skc: GHU 9 Plan: GHU 9 - Lateral #2 Drilling Plan Rev 0308 TVD Ref: KB (4699.00 ft above MSL) November 19, 2008



### Legend

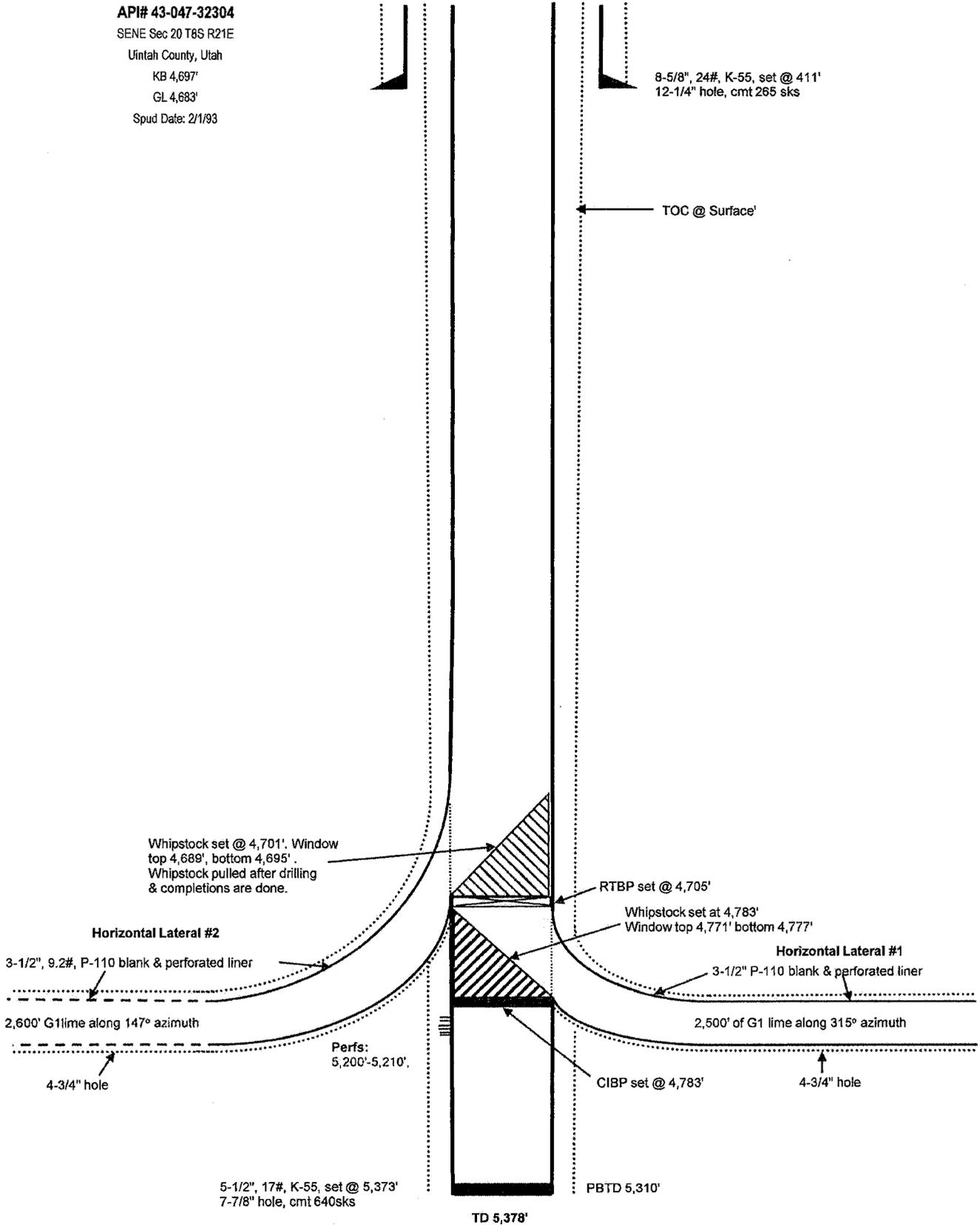
- GHU 9 - Lateral #2 Drilling Plan 11-13-08
- GHU 9 Field Survey
- GHU - Upper Lateral G1 Lime Bottom
- GHU 9 - Upper Lateral G1 Lime Top

		Critical Points						
Critical Point	MD	INCL	AZIM	TVD	YSEC	N(+)/S(-)	E(+)/W(-)	DLS
Tie-In to Original Hole	4395.00	1.00	164.00	4393.77	85.05	-85.27	24.45	
KOP-Build 11.38/100ft	4695.00	0.00	147.00	4693.75	87.55	-87.78	25.17	0.00
G1 Lime Top	5395.03	79.68	147.00	5189.00	500.71	-434.30	250.20	11.38
Hold 147 azm	5498.04	91.40	147.00	5197.00	603.23	-520.28	306.04	11.38
PBHL/TD	8098.04	91.40	147.00	5133.48	3202.36	-2700.17	1721.68	0.00

True North  
Tot Corr (M->T  
+11.4390°)  
Mag Dec (+11.439°)

Quality Control  
Date Drawn: Wed 03:41  
PM November 19, 2008  
Drawn by: Current User  
Checked by:

**Proposed**  
**GHU 9**  
**API# 43-047-32304**  
 SENE Sec 20 T8S R21E  
 Uintah County, Utah  
 KB 4,697'  
 GL 4,683'  
 Spud Date: 2/1/93



# QUESTAR EXPLR. & PROD.

## GH #9

LOCATED IN UINTAH COUNTY, UTAH  
SECTION 20, T8S, R21E, S.L.B.&M.

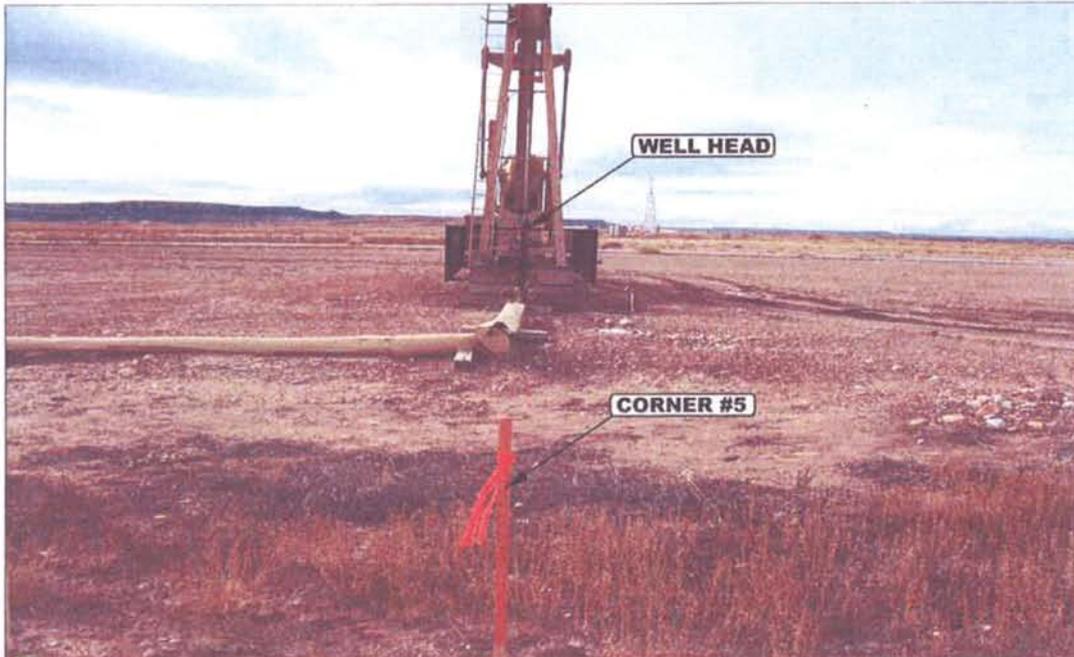


PHOTO: VIEW FROM CORNER #5 TO WELL HEAD

CAMERA ANGLE: WESTERLY



PHOTO: VIEW OF EXISTING ACCESS

CAMERA ANGLE: SOUTHWESTERLY



- Since 1964 -

**UELS**

Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

LOCATION PHOTOS

11 07 08  
MONTH DAY YEAR

PHOTO

TAKEN BY: J.W.

DRAWN BY: J.J.

REVISED: 00-00-00

# T8S, R21E, S.L.B.&M.

# QUESTAR EXPLR. & PROD.

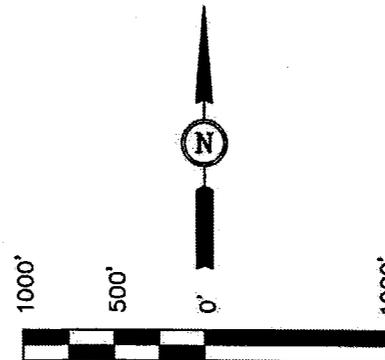
Well location, GH #9, located as shown in the SE 1/4 NE 1/4 of Section 20, T8S, R21E, S.L.B.&M. Uintah County, Utah.

### BASIS OF ELEVATION

BENCH MARK 20EAM LOCATED IN THE SE 1/4 OF SECTION 35, T8S, R21E, S.L.B.&M. TAKEN FROM THE OURAY SE, QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 4697 FEET.

### BASIS OF BEARINGS

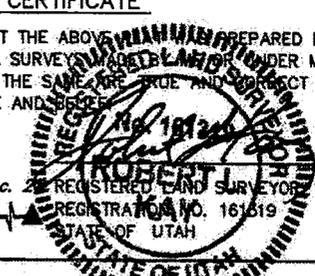
BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



SCALE

CERTIFICATE

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



S 1/4 Cor. Sec. 20 REGISTERED LAND SURVEYOR  
BRASS CAP REGISTRATION NO. 161619  
STATE OF UTAH

1967 Brass Cap  
0.7' High, Private  
Alum. Cap, Scattered  
Stones

1967 Brass Cap  
0.7' High

NW Lateral

S89°32'49"W - 2644.92' (Meas.) S89°03'11"W - 2643.10' (Meas.)

2450'

See Detail "A"

⊙ Below Left

1967 Brass Cap  
0.7' High

2057'

N01°32'54"W - 2658.51' (Meas.)

GH #9

Elev. Ungraded Ground = 4683'

663'

20

Brass Cap

21

1967 Brass Cap  
1.0' High, Private  
Copperweld, Two  
Large Stones

N00°41'07"E - 2679.27' (Meas.)

1967 Brass Cap  
1.0' High, Large  
Stone

1967 Brass Cap  
1.0' High, Pile  
of Stones

Brass Cap

SE Lateral

S44°15'34"E  
2706.71' (Meas.)

N01°33'03"W  
2652.46' (Meas.)

800'

1000'

S89°52'34"W - 2686.92' (Meas.)

S89°53'24"W - 2686.55' (Meas.)

S89°38'20"W - 2662.14' (Meas.)

### LEGEND:

- └─┘ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

### UINTAH ENGINEERING & LAND SURVEYING

85 SOUTH 200 EAST - VERNAL, UTAH 84078  
(435) 789-1017

NAD 83 (TARGET SE LATERAL)	NAD 83 (TARGET NW LATERAL)	NAD 83 (SURFACE LOCATION)
LATITUDE = 40°06'15.03" (40.104175)	LATITUDE = 40°06'56.98" (40.115828)	LATITUDE = 40°06'37.12" (40.110311)
LONGITUDE = 109°33'56.62" (109.565728)	LONGITUDE = 109°34'44.96" (109.579158)	LONGITUDE = 109°34'16.25" (109.571181)
NAD 27 (TARGET SE LATERAL)	NAD 27 (TARGET NW LATERAL)	NAD 27 (SURFACE LOCATION)
LATITUDE = 40°06'15.16" (40.104211)	LATITUDE = 40°06'57.11" (40.115864)	LATITUDE = 40°06'37.25" (40.110347)
LONGITUDE = 109°33'54.14" (109.565039)	LONGITUDE = 109°34'42.47" (109.578464)	LONGITUDE = 109°34'13.76" (109.570489)

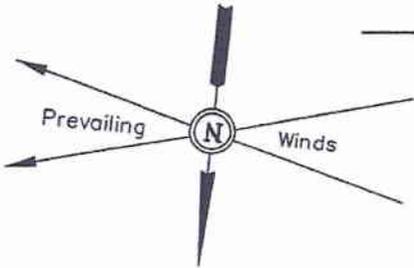
SCALE 1" = 1000'	DATE SURVEYED: 11-04-08	DATE DRAWN: 11-06-08
PARTY J.W. A.G. S.L.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE QUESTAR EXPLR. & PROD.	

QUESTAR EXPLR. & PROD.

FIGURE #1

LOCATION LAYOUT FOR

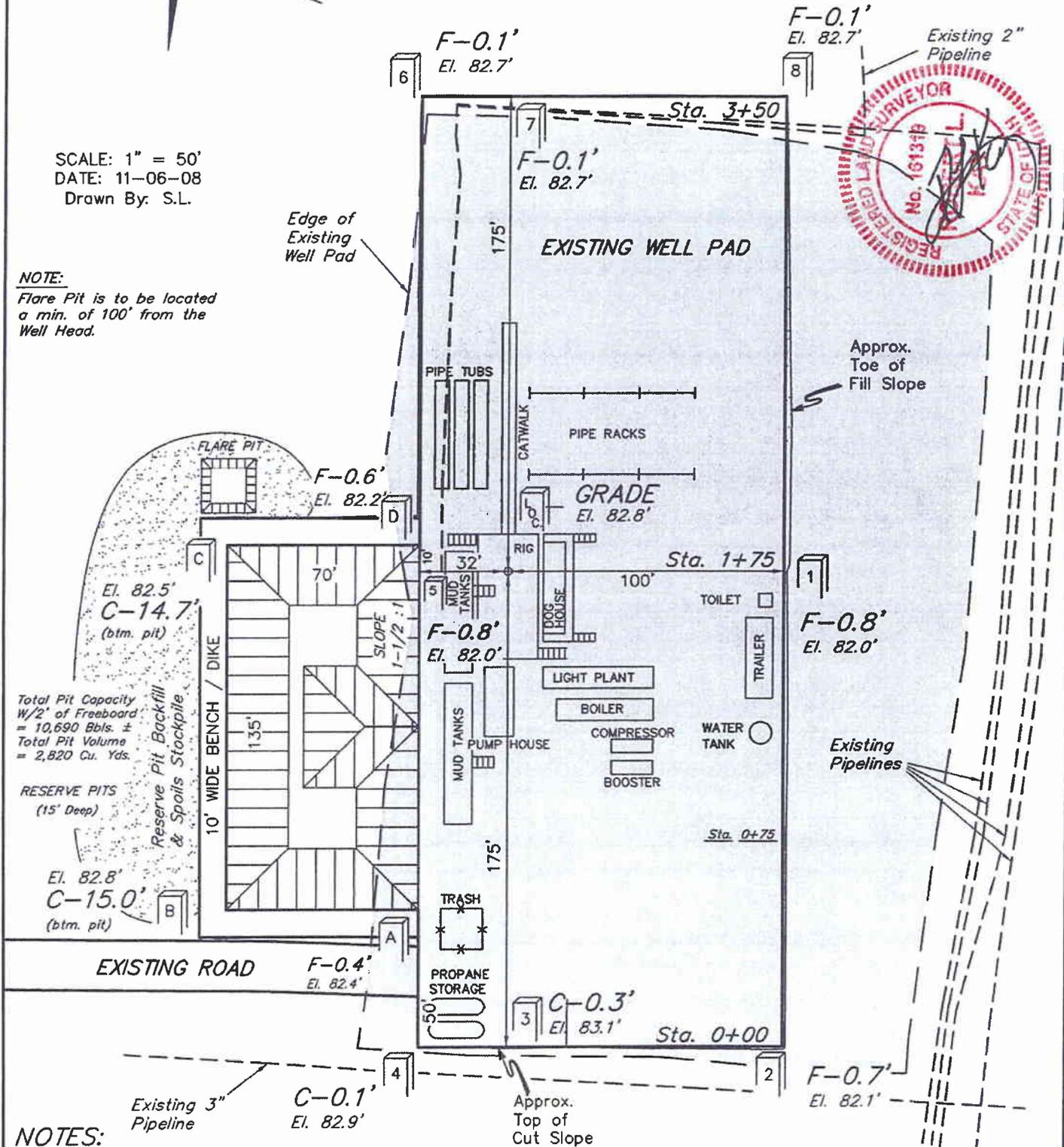
GH #9  
SECTION 20, T8S, R21E, S.L.B.&M.  
2057' FNL 663' FEL



SCALE: 1" = 50'  
DATE: 11-06-08  
Drawn By: S.L.

NOTE:

Flare Pit is to be located a min. of 100' from the Well Head.



NOTES:

Elev. Ungraded Ground At Loc. Stake = 4682.8'  
FINISHED GRADE ELEV. AT LOC. STAKE = 4682.8'

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

QUESTAR EXPLR. & PROD.

FIGURE #2

TYPICAL CROSS SECTIONS FOR

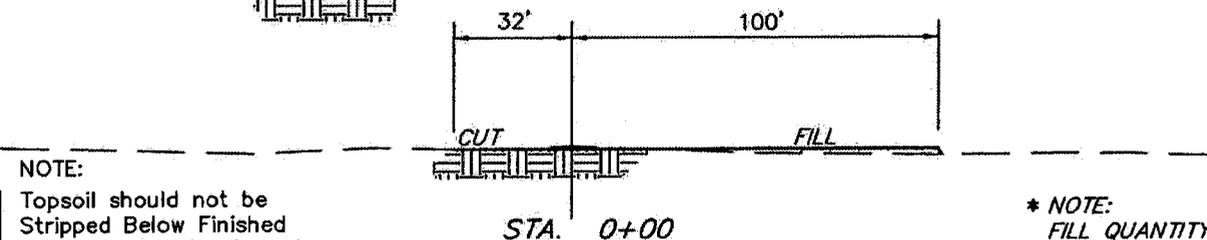
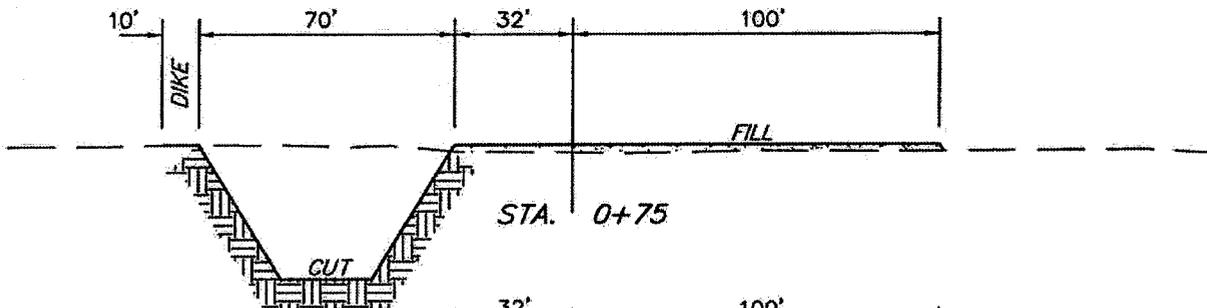
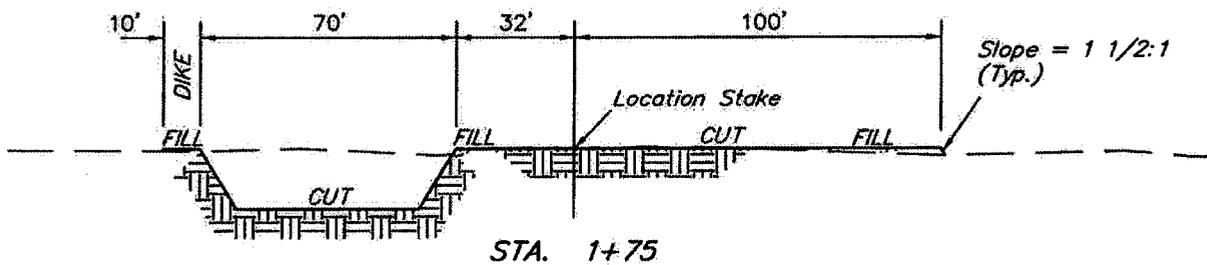
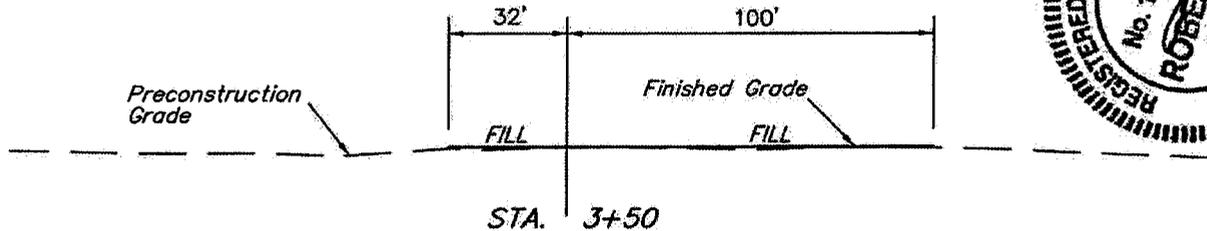
GH #9

SECTION 20, T8S, R21E, S.L.B.&M.

2057' FNL 663' FEL

1" = 20'  
X-Section Scale  
1" = 50'

DATE: 11-06-08  
Drawn By: S.L.



NOTE:  
Topsoil should not be Stripped Below Finished Grade on Substructure Area.

\* NOTE:  
FILL QUANTITY INCLUDES 5% FOR COMPACTION

APPROXIMATE ACREAGES

EXISTING WELL SITE DISTURBANCE = ±1.599 ACRES  
PROPOSED WELL SITE DISTURBANCE = ±0.280 ACRES

APPROXIMATE YARDAGES

CUT			
(6") Topsoil Stripping	=	230	Cu. Yds.
Remaining Location	=	2,730	Cu. Yds.
<b>TOTAL CUT</b>	<b>=</b>	<b>2,960</b>	<b>CU.YDS.</b>
<b>FILL</b>	<b>=</b>	<b>1,380</b>	<b>CU.YDS.</b>

<b>TOTAL = ±1.879 ACRES</b>	
Excess Material	= 1,580 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	= 1,640 Cu. Yds.
DEFICIT UNBALANCE (After Interim Rehabilitation)	= <60> Cu. Yds.

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85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

QUESTAR EXPLR. & PROD.

INTERIM RECLAMATION PLAN FOR

GH #9

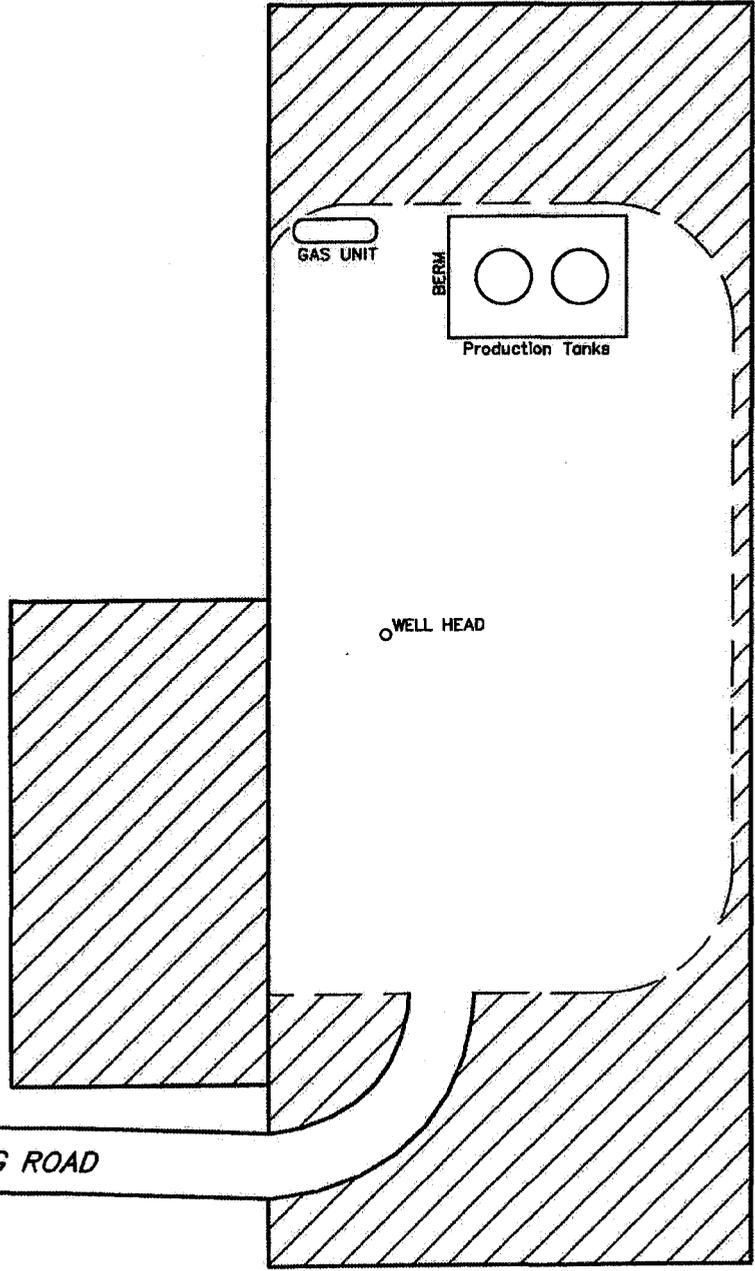
SECTION 20, T8S, R21E, S.L.B.&M.

2057' FNL 663' FEL

FIGURE #3

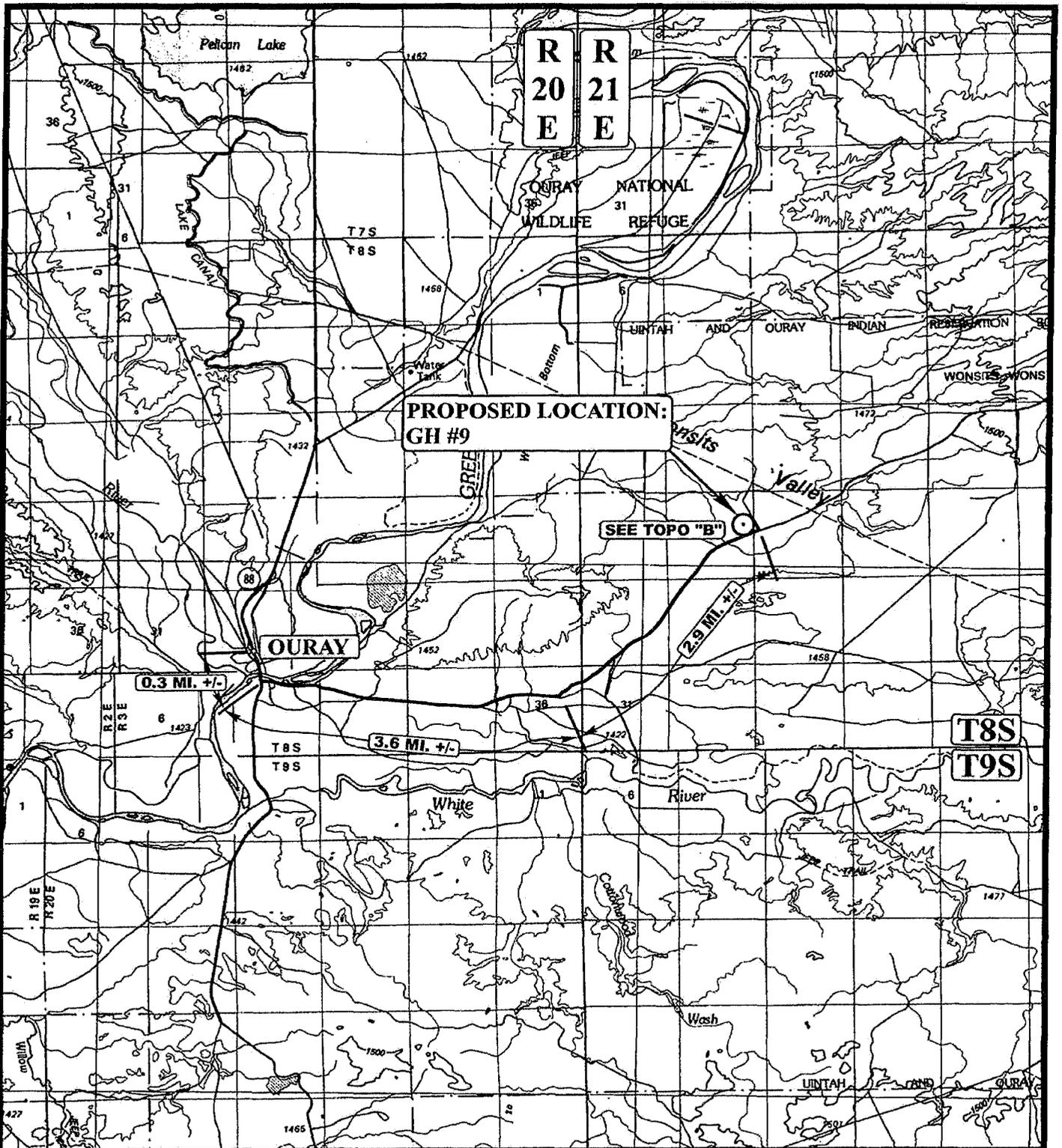


SCALE: 1" = 50'  
DATE: 11-06-08  
Drawn By: S.L.



 INTERIM RECLAMATION

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017



**LEGEND:**

⊙ PROPOSED LOCATION

**QUESTAR EXPLR. & PROD.**

**GH #9**  
**SECTION 20, T8S, R21E, S.L.B.&M.**  
**2057' FNL 663' FEL**

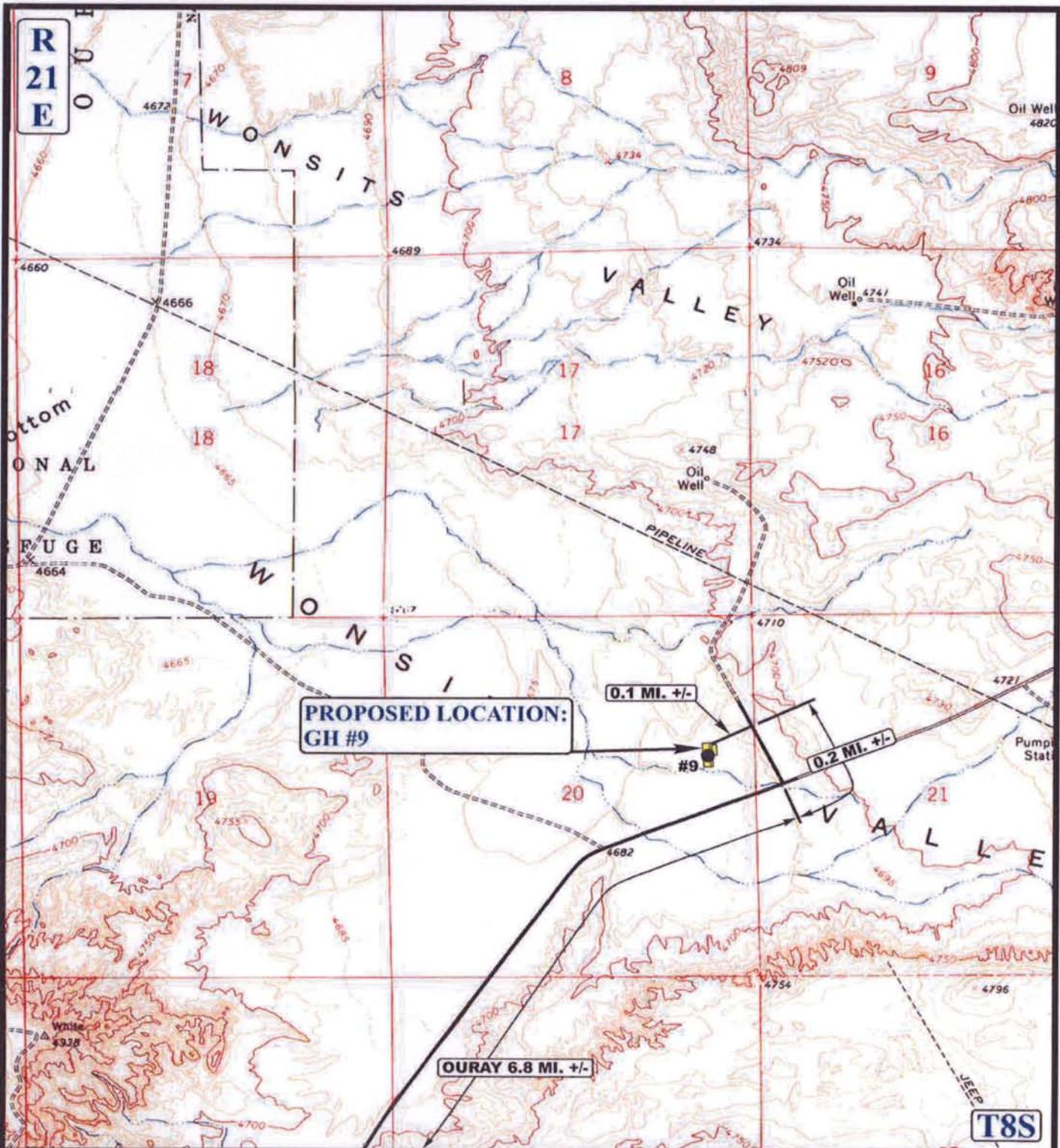


**Utah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813



**TOPOGRAPHIC** 11 | 07 | 08  
**MAP** MONTH | DAY | YEAR  
 SCALE: 1:100,000 | DRAWN BY: J.J. | REVISED: 00-00-00





**LEGEND:**

- EXISTING ROAD
- PROPOSED ACCESS ROAD



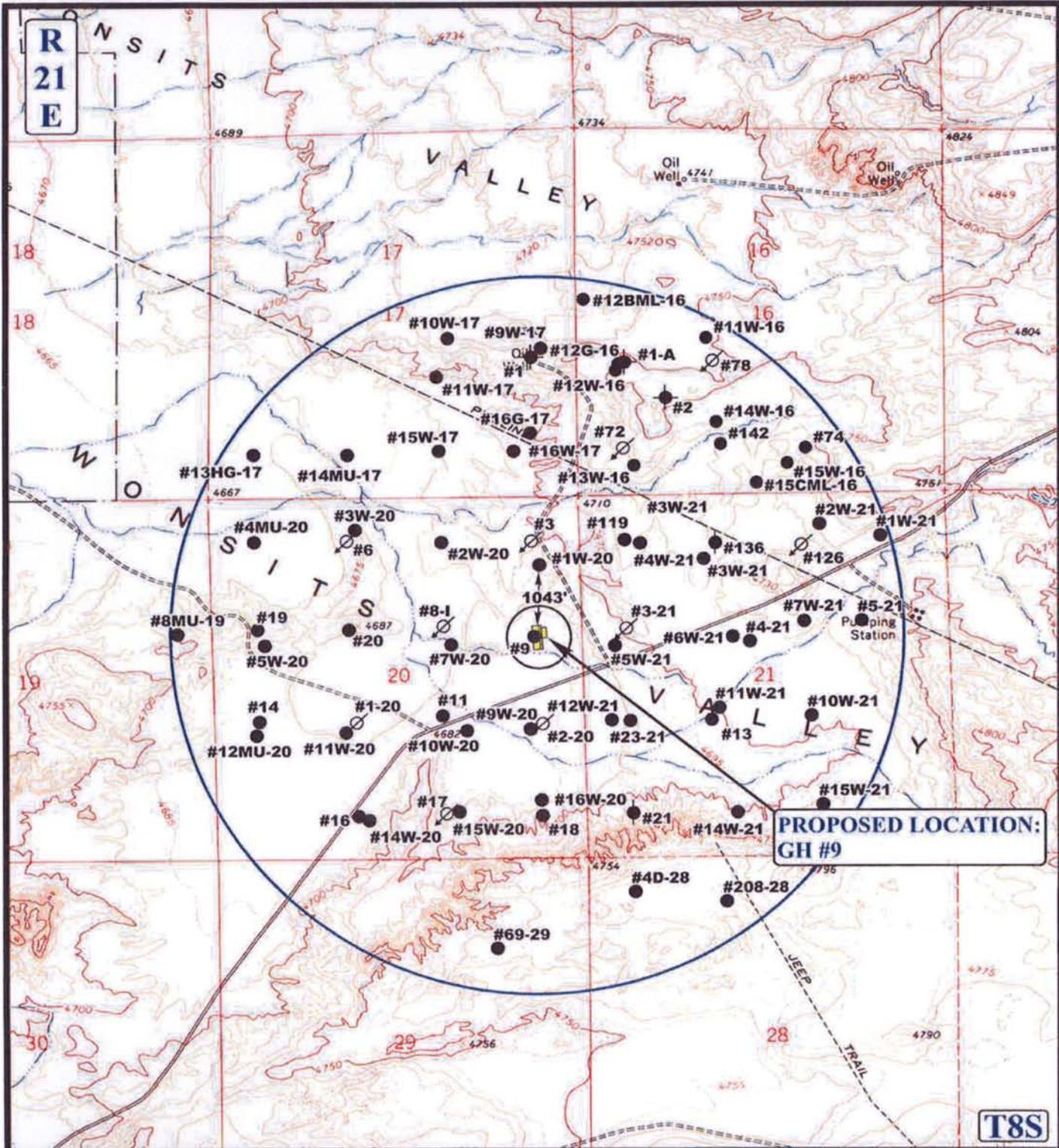
**QUESTAR EXPLR. & PROD.**

**GH #9**  
**SECTION 20, T8S, R21E, S.L.B.&M.**  
**2057' FNL 663' FEL**

**UELS** Uintah Engineering & Land Surveying  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813

**TOPOGRAPHIC MAP** **11 07 08**  
 MONTH DAY YEAR  
 SCALE: 1" = 2000' DRAWN BY: J.J. REVISED: 00-00-00





**LEGEND:**

- ⊗ DISPOSAL WELLS
- PRODUCING WELLS
- ⊖ SHUT IN WELLS
- ⊕ WATER WELLS
- ⊙ ABANDONED WELLS
- ⊙ TEMPORARILY ABANDONED



**QUESTAR EXPLR. & PROD.**

GH #9  
 SECTION 20, T8S, R21E, S.L.B.&M.  
 2057' FNL 663' FEL



Uintah Engineering & Land Surveying  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813

**TOPOGRAPHIC MAP** 11 07 08  
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: J.J. REVISED: 00-00-00



**WORKSHEET  
APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 11/20/2008

API NO. ASSIGNED: 43-047-32304

WELL NAME: GH 9  
 OPERATOR: QUESTAR EXPLORATION & ( N5085 )  
 CONTACT: LAURA BILLS

PHONE NUMBER: 435-781-4331

PROPOSED LOCATION:

SENE 20 080S 210E  
 SURFACE: 2057 FNL 0663 FEL  
 BOTTOM: 0010 FNL 2450 FWL  
 COUNTY: UINTAH  
 LATITUDE: 40.11020 LONGITUDE: -109.5705  
 UTM SURF EASTINGS: 621834 NORTHINGS: 4440758  
 FIELD NAME: GYPSUM HILLS ( 610 )

INSPECT LOCATN BY: / /		
Tech Review	Initials	Date
Engineering		
Geology		
Surface		

LEASE TYPE: 1 - Federal  
 LEASE NUMBER: U-0140740  
 SURFACE OWNER: 2 - Indian

PROPOSED FORMATION: GRRV  
 COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

- Plat
- Bond: Fed[1] Ind[] Sta[] Fee[]  
(No. ESB000024 )
- Potash (Y/N)
- Oil Shale 190-5 (B) or 190-3 or 190-13
- Water Permit  
(No. 49-2153 )
- RDCC Review (Y/N)  
(Date: \_\_\_\_\_ )
- Fee Surf Agreement (Y/N)
- Intent to Commingle (Y/N)

LOCATION AND SITING:

- R649-2-3. *\* Horizontal*
- Unit: GYPSUM HILLS (GRRV)
- R649-3-2. General
- Siting: 460 From Qtr/Qtr & 920' Between Wells
- R649-3-3. Exception
- Drilling Unit
- Board Cause No: 253-01
- Eff Date: 6-14-2004
- Siting: Suspends General Siting
- R649-3-11. Directional Drill

COMMENTS: \_\_\_\_\_

STIPULATIONS: 1- Federal Approval



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office

P.O. Box 45155

Salt Lake City, Utah 84145-0155

**IN REPLY REFER TO:**

3160

(UT-922)

December 2, 2008

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2008 Plan of Development Gypsum Hills Unit Uintah County,  
Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following horizontal re-entries are planned for calendar year 2008 within the Gypsum Hills Unit, Uintah County, Utah.

API #	WELL NAME	LOCATION
(Proposed PZ Green River/Horizontal)		
43-047-32304 GH 9 Sec 20 T08S R21E 2057 FNL 0663 FEL		
	LAT # 1 Sec 20 T08S R21E 0010 FNL 2450 FWL	
	LAT # 2 Sec 21 T08S R21E 1000 FSL 0800 FWL	
43-047-34723 GHX 13HG-17-8-21 Sec 17 T08S R21E 0675 FSL 0661 FWL		
	LAT # 1 Sec 19 T08S R21E 2000 FNL 1000 FEL	

This office has no objection to permitting the wells at this time.

/s/ Michael L. Coulthard

bcc: File – Gypsum Hills Unit  
 Division of Oil Gas and Mining  
 Central Files  
 Agr. Sec. Chron  
 Fluid Chron



JON M. HUNTSMAN, JR.  
Governor

GARY R. HERBERT  
Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

December 2, 2008

Questar Exploration & Production Co.  
11002 E 17500 S  
Vernal, UT 84078

Re: GH 9 Well, Surface Location 2057' FNL, 663' FEL, SE NE, Sec. 20, T. 8 South,  
R. 21 East, (1) Bottom Location 10' FNL, 2450' FWL, NE NW, Sec. 20, T. 8 South,  
R. 21 East, (2) Bottom Location 1000' FSL, 800' FWL, SW SW, Sec. 21, T. 8 South,  
R. 21 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.

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 43-047-32304.

Sincerely,

Gil Hunt  
Associate Director

pab  
Enclosures

cc: Uintah County Assessor  
Bureau of Land Management, Vernal Field Office



**Operator:** Questar Exploration & Production Co.

**Well Name & Number** GH 9

**API Number:** 43-047-32304

**Lease:** U-0140740

<b>Surface Location:</b>	<u>SE NE</u>	<b>Sec.</b> <u>20</u>	<b>T.</b> <u>8 South</u>	<b>R.</b> <u>21 East</u>
<b>(1) Bottom Location:</b>	<u>NE NW</u>	<b>Sec.</b> <u>20</u>	<b>T.</b> <u>8 South</u>	<b>R.</b> <u>21 East</u>
<b>(2) Bottom Location:</b>	<u>SW SW</u>	<b>Sec.</b> <u>21</u>	<b>T.</b> <u>8 South</u>	<b>R.</b> <u>21 East</u>

### 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

Notify the Division within 24 hours of spudding the well.

- Contact Carol Daniels at (801) 538-5284

Notify the Division prior to commencing operations to plug and abandon the well.

- Contact Dustin Doucet at (801) 538-5281 (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. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.

5. In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  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.	<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> U-0140740
	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>  _____
	<b>7. UNIT or CA AGREEMENT NAME:</b> GYPSUM HILLS (GRRV)
<b>1. TYPE OF WELL</b> Oil Well	<b>8. WELL NAME and NUMBER:</b> GH 9
<b>2. NAME OF OPERATOR:</b> QUESTAR EXPLORATION & PRODUCTION CO	<b>9. API NUMBER:</b> 43047323040000
<b>3. ADDRESS OF OPERATOR:</b> 11002 East 17500 South , Vernal, UT, 84078	<b>PHONE NUMBER:</b> 435 781-4362 Ext
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2057 FNL 0663 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SENE Section: 20 Township: 08.0S Range: 21.0E Meridian: S	<b>9. FIELD and POOL or WILDCAT:</b> GYPSUM HILLS  <b>COUNTY:</b> UINTAH  <b>STATE:</b> UTAH

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

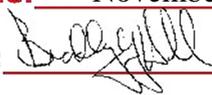
TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 11/30/2009	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input checked="" type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: _____

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

Questar Exploration and Production Company hereby requests a one year extension for the APD on the above captioned well.

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

Date: November 30, 2009

By: 

<b>NAME (PLEASE PRINT)</b> Jan Nelson	<b>PHONE NUMBER</b> 435 781-4331	<b>TITLE</b> Permit Agent
<b>SIGNATURE</b> N/A	<b>DATE</b> 11/30/2009	



**The Utah Division of Oil, Gas, and Mining**

- State of Utah
- Department of Natural Resources

**Electronic Permitting System - Sundry Notices**

**Request for Permit Extension Validation Well Number 43047323040000**

**API:** 43047323040000

**Well Name:** GH 9

**Location:** 2057 FNL 0663 FEL QTR SENE SEC 20 TWP 080S RNG 210E MER S

**Company Permit Issued to:** QUESTAR EXPLORATION & PRODUCTION CO

**Date Original Permit Issued:** 12/2/2008

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 rightof- 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

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

**Signature:** Jan Nelson

**Date:** 11/30/2009

**Title:** Permit Agent **Representing:** QUESTAR EXPLORATION & PRODUCTION CO

**Date:** November 30, 2009

**By:** 

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> U-0140740
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  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.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>  <b>7. UNIT or CA AGREEMENT NAME:</b> GYPSUM HILLS (GRRV)
<b>1. TYPE OF WELL</b> Oil Well	<b>8. WELL NAME and NUMBER:</b> GH 9
<b>2. NAME OF OPERATOR:</b> QUESTAR EXPLORATION & PRODUCTION CO	<b>9. API NUMBER:</b> 43047323040000
<b>3. ADDRESS OF OPERATOR:</b> 11002 East 17500 South , Vernal, UT, 84078	<b>PHONE NUMBER:</b> 435 781-4362 Ext
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2057 FNL 0663 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SENE Section: 20 Township: 08.0S Range: 21.0E Meridian: S	<b>9. FIELD and POOL or WILDCAT:</b> GYPSUM HILLS  <b>COUNTY:</b> UINTAH  <b>STATE:</b> UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input checked="" type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER:
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 4/20/2010			
<input type="checkbox"/> SPUD REPORT Date of Spud:			
<input type="checkbox"/> DRILLING REPORT Report Date:			

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

Questar Exploration and Production Company (QEP) drilled Lateral #2 shallower than anticipated. The projected TD was 8,098', QEP TD this well as 7,766'. Detail will follow in 3160-4 Well Completion Report.

**Accepted by the**  
**Utah Division of**  
**Oil, Gas and Mining**  
**FOR RECORD ONLY**  
 April 21, 2010

<b>NAME (PLEASE PRINT)</b> Jan Nelson	<b>PHONE NUMBER</b> 435 781-4331	<b>TITLE</b> Permit Agent
<b>SIGNATURE</b> N/A	<b>DATE</b> 4/20/2010	

Division of Oil, Gas and Mining  
**OPERATOR CHANGE WORKSHEET (for state use only)**

**ROUTING**  
 CDW

Change of Operator (Well Sold)

**X - Operator Name Change**

The operator of the well(s) listed below has changed, effective:

**6/14/2010**

<b>FROM: (Old Operator):</b> N5085-Questar Exploration and Production Company 1050 17th St, Suite 500 Denver, CO 80265  Phone: 1 (303) 308-3048	<b>TO: (New Operator):</b> N3700-QEP Energy Company 1050 17th St, Suite 500 Denver, CO 80265  Phone: 1 (303) 308-3048
--	--

WELL NAME	CA No.	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
SEE ATTACHED									

**OPERATOR CHANGES DOCUMENTATION**

Enter date after each listed item is completed

- (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 6/28/2010
- (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 6/28/2010
- The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 6/24/2010
- Is the new operator registered in the State of Utah: Business Number: 764611-0143
- (R649-9-2) Waste Management Plan has been received on: Requested
- Inspections of LA PA state/fee well sites complete on: n/a
- Reports current for Production/Disposition & Sundries on: ok
- 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 8/16/2010 BIA not yet
- Federal and Indian Units:**  
 The BLM or BIA has approved the successor of unit operator for wells listed on: 8/16/2010
- Federal and Indian Communization Agreements ("CA"):**  
 The BLM or BIA has approved the operator for all wells listed within a CA on: N/A
- Underground Injection Control ("UIC")** 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: 6/29/2010

**DATA ENTRY:**

- Changes entered in the **Oil and Gas Database** on: 6/30/2010
- Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 6/30/2010
- Bond information entered in RBDMS on: 6/30/2010
- Fee/State wells attached to bond in RBDMS on: 6/30/2010
- Injection Projects to new operator in RBDMS on: 6/30/2010
- Receipt of Acceptance of Drilling Procedures for APD/New on: n/a

**BOND VERIFICATION:**

- Federal well(s) covered by Bond Number: ESB000024
- Indian well(s) covered by Bond Number: 965010693
- (R649-3-1) The **NEW** operator of any state/fee well(s) listed covered by Bond Number 965010695
- The **FORMER** operator has requested a release of liability from their bond on: n/a

**LEASE INTEREST OWNER NOTIFICATION:**

- (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

FORM 9

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		5. LEASE DESIGNATION AND SERIAL NUMBER See attached
		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: See attached
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: See attached
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____		8. WELL NAME and NUMBER: See attached
2. NAME OF OPERATOR: Questar Exploration and Production Company <i>N5085</i>		9. API NUMBER: Attached
3. ADDRESS OF OPERATOR: 1050 17th Street, Suite 500 CITY: Denver STATE: CO ZIP: 80265	PHONE NUMBER: (303) 672-6900	10. FIELD AND POOL, OR WILDCAT: See attached
4. LOCATION OF WELL FOOTAGES AT SURFACE: See attached		COUNTY: Attached
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		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: <u>6/14/2010</u>	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: <u>Operator Name Change</u>
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

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

Effective June 14, 2010 Questar Exploration and Production Company changed its name to QEP Energy Company. This name change involves only an internal corporate name change and no third party change of operator is involved. The same employees will continue to be responsible for operations of the properties described on the attached list. All operations will continue to be covered by bond numbers:  
 Federal Bond Number: 965002976 (BLM Reference No. ESB000024) *N3700*  
 Utah State Bond Number: ~~965003033~~ *965010695*  
 Fee Land Bond Number: ~~965003033~~ *965010695*  
 BIA Bond Number: ~~799446~~ *965010693*

The attached document is an all inclusive list of the wells operated by Questar Exploration and Production Company. As of June 14, 2010 QEP Energy Company assumes all rights, duties and obligations as operator of the properties as described on the list

NAME (PLEASE PRINT) <u>Morgan Anderson</u>	TITLE <u>Regulatory Affairs Analyst</u>
SIGNATURE <i>Morgan Anderson</i>	DATE <u>6/23/2010</u>

(This space for State use only)

RECEIVED  
JUN 28 2010

DIV. OF OIL, GAS & MINING  
(See Instructions on Reverse Side)

APPROVED 6/13/2010  
*Earlene Russell*  
Division of Oil, Gas and Mining  
Earlene Russell, Engineering Technician

Questar Exploration Production Company (N5085) to QEP Energy Company (N3700)  
 GYPSUM HILLS (GRRV)  
 effective June 14, 2010

well_name	sec	twp	rng	api	entity	mineral lease	type	stat	C
GH 4	19	080S	210E	4304730028	5355	Federal	OW	P	
GH 1-19	19	080S	210E	4304731065	5355	Federal	OW	P	
GH 23-21	21	080S	210E	4304731541	5355	Federal	OW	P	
GH 4-21	21	080S	210E	4304731826	5355	Federal	OW	P	
GH 5-21	21	080S	210E	4304731827	5355	Federal	OW	P	
GH 9	20	080S	210E	4304732304	5355	Federal	OW	DRL	C
GH 11	20	080S	210E	4304732459	5355	Federal	OW	P	
GH 13	21	080S	210E	4304732460	5355	Federal	OW	P	
GH 14	20	080S	210E	4304732647	5355	Federal	OW	P	
GH 18	20	080S	210E	4304732650	5355	Federal	OW	P	
GH 19	20	080S	210E	4304732651	5355	Federal	OW	P	
GH 20	20	080S	210E	4304732652	5355	Federal	OW	P	
GH 16	20	080S	210E	4304732675	5355	Federal	OW	P	
GH 10W-19-8-21	19	080S	210E	4304733528	12736	Federal	GW	P	
GH 10G-19-8-21	19	080S	210E	4304733566	5355	Federal	OW	P	
WV 11W-17-8-21	17	080S	210E	4304733912	13228	Federal	GW	P	
WV 5W-17-8-21	17	080S	210E	4304733954	13332	Federal	GW	P	
WV 7W-17-8-21	17	080S	210E	4304733956	13330	Federal	GW	P	
GH 9W-17-8-21	17	080S	210E	4304734150	13392	Federal	GW	P	
GH 16W-17-8-21	17	080S	210E	4304734156	13354	Federal	GW	P	
WVX 10W-17-8-21	17	080S	210E	4304734561	13744	Federal	GW	P	
GHX 15W-17-8-21	17	080S	210E	4304734562	13674	Federal	GW	P	
GHX 13HG-17-8-21	17	080S	210E	4304734723	5355	Federal	OW	P	
GH 1G-17-8-21	17	080S	210E	4304734927	5355	Federal	OW	P	
WVX 2W-17-8-21	17	080S	210E	4304734928	14253	Federal	GW	P	
WVX 8W-17-8-21	17	080S	210E	4304734929	13792	Federal	GW	P	
GH 4MU-20-8-21	20	080S	210E	4304735068	14213	Federal	GW	P	
GH 13MU-20-8-21	20	080S	210E	4304735070	14817	Federal	GW	P	
GH 5W-20-8-21	20	080S	210E	4304735097	14557	Federal	GW	P	
WVX 3MU-17-8-21	17	080S	210E	4304735318	14113	Federal	GW	P	
GH 15ML-18-8-21	18	080S	210E	4304735323	15483	Federal	GW	P	
GH 1ML-19-8-21	19	080S	210E	4304735324	14824	Federal	GW	P	
WVX 14MU 17-8-21	17	080S	210E	4304735369	14098	Federal	GW	P	
WVX 12MU-17-8-21	17	080S	210E	4304735370	15108	Federal	GW	P	
WVX 8MU-19-8-21	19	080S	210E	4304735372	14241	Federal	GW	P	
GH 10ML-18-8-21	18	080S	210E	4304735391	15482	Federal	GW	P	
GH 8G-17-8-21	17	080S	210E	4304737992	5355	Federal	OW	P	
GH 16G-17-8-21	17	080S	210E	4304737993	5355	Federal	OW	P	
GH 8G-18-8-21	18	080S	210E	4304738661		Federal	GW	APD	C
GH 6-20-8-21	20	080S	210E	4304738662	17041	Federal	GW	P	

Bonds: BLM = ESB000024  
 BIA = 956010693  
 State = 965010695



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office  
P.O. Box 45155  
Salt Lake City, UT 84145-0155  
<http://www.blm.gov/ut/st/en.html>



IN REPLY REFER TO:  
3100  
(UT-922)

JUL 28 2010

### Memorandum

To: Vernal Field Office, Price Field Office, Moab Field Office

From: Chief, Branch of Minerals

*Roy L. Bankart*

Subject: Name Change Recognized

Attached is a copy of the Certificate of Name Change issued by the Texas Secretary of State and a decision letter recognizing the name change from the Eastern States Office. We have updated our records to reflect the name change in the attached list of leases.

The name change from **Questar Exploration and Production Company** into **QEP Energy Company** is effective June 8, 2010.

cc: MMS  
UDOGM

RECEIVED

AUG 16 2010

DIV. OF OIL, GAS & MINERALS

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

AMENDED REPORT  FORM 8  
(highlight changes)

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

5. LEASE DESIGNATION AND SERIAL NUMBER:  
UTU0140740

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:  
N/A

7. UNIT or CA AGREEMENT NAME:  
GYPSUM HILLS

8. WELL NAME and NUMBER:  
GH 9

9. API NUMBER:  
4304732304

10. FIELD AND POOL, OR WILDCAT:  
GYPSUM HILLS

11. QTR/CTR. SECTION, TOWNSHIP, RANGE, MERIDIAN:  
SENE 20 T8S R21

12. COUNTY: UINTAH 13. STATE: UTAH

14. DATE SPUNDED: 3/25/2010 15. DATE T.D. REACHED: 4/13/2010 16. DATE COMPLETED: 6/22/2010  
ABANDONED  READY TO PRODUCE

17. ELEVATIONS (DF, RKB, RT, GL):  
KB - 14'

18. TOTAL DEPTH: MD 6,978 8,255 TVD 5,890 19. PLUG BACK T.D.: MD 5,310 TVD  
20. IF MULTIPLE COMPLETIONS, HOW MANY? \* 21. DEPTH BRIDGE MD PLUG SET: TVD

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)  
No new logs

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
4.75	3.5	9.2	5,422	7,682					
4.75	3.5	9.2	5,496	7,757					

25. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-7/8"	4,732							

26. PRODUCING INTERVALS

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)	INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
(A) G-1 Lime Lat #1	4,858	4,862			5,422 7,682			Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/>
(B) G-1 Lime Lat #2	4,775	4,784			5,496 7,757			Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/>
(C)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
(D)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>

27. PERFORATION RECORD

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

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
4858' - 4862' Lateral #1	Acidize w/ 35,000 gals of 15% HCL
4775' - 4784' Lateral #2	Acidize w/ 14,000 gals of 15% HCL

29. ENCLOSED ATTACHMENTS:

ELECTRICAL/MECHANICAL LOGS  GEOLOGIC REPORT  DST REPORT  DIRECTIONAL SURVEY  
 SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION  CORE ANALYSIS  OTHER: \_\_\_\_\_

30. WELL STATUS:  
Producing

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JUL 19 2010  
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(5/2000) (CONTINUED ON BACK) CONFIDENTIAL

31. INITIAL PRODUCTION

INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED: 4/29/2010	TEST DATE: 5/2/2010	HOURS TESTED: 24	TEST PRODUCTION RATES: →	OIL - BBL: 256	GAS - MCF: 32	WATER - BBL: 165	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS. 150	CSG. PRESS. 45	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL - BBL: GAS - MCF: WATER - BBL: INTERVAL STATUS: Open

INTERVAL B (As shown in item #26)

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

INTERVAL C (As shown in item #26)

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

INTERVAL D (As shown in item #26)

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

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

33. SUMMARY OF POROUS ZONES (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, lime 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)
G-1 Lime					

35. ADDITIONAL REMARKS (Include plugging procedure)

MD 8255 TWD 5290 MD 7766 TWD 5143  
 Dual Lateral Oil Well. See Attachment Page One for more Lateral & DOFP info. See Well File.  
 Lateral #1 BHL 0105 FWL 2924 FWL Lateral #2 BHL 0982 FSL 0984 FWL

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

NAME (PLEASE PRINT) Dahn Caldwell TITLE Office Administrator  
 SIGNATURE Dahn Caldwell DATE 7/15/2010

This report must be submitted within 30 days of

- completing or plugging a new well
- reentering a previously plugged and abandoned well
- drilling horizontal laterals from an existing well bore
- significantly deepening an existing well bore below the previous bottom-hole depth
- recompleting to a different producing formation
- 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

**CONFIDENTIAL**

## **GH 9 – DUAL LATERAL WELL**

### **ATTACHMENT PAGE ONE**

**#4 - Lateral #1 – (nw) TD @ 8255', BHL - NENW, 20-T8S-R21E, 104' FNL, 2216' FWL**

**Lateral #2 – (se) TD @ 7766', BHL – SWSW, 21-T8S-R21E, 953' FSL, 987' FWL**

**#16 & #31 - Lateral #1 was completed on April 28, 2010. So the DOFP was 4/29/10. Lateral #2 was completed on June 22, 2010.**

**#27 – Perforation Record – 3-1/2", 9.2#, P-110, Ultra Flush – Alternating joints of blank & perforated on both laterals.**

**CONFIDENTIAL**

# GH 9 - ST1 off Lat 1 - Field Survey Survey Report

<p>Report Date: June 22, 2010                  Client: QEP ENERGY                  Field: Uinta                  Structure / Slot: Gypsum Hills / GHU 9                  Well: GH 9                  Borehole: ST1 off Lat 1                  UWI/API#:                   Survey Name / Date: GH 9 - ST1 off Lat 1 - Field Survey / April 5, 2010                  Tort / AHD / DDI / ERD ratio: 230.074° / 3251.23 ft / 6.066 / 0.615                  Grid Coordinate System: NAD83 Utah State Planes, Central Zone, US Feet                  Location Lat/Long: N 40 6 37.120, W 109 34 16.250                  Location Grid N/E Y/X: N 7214721.537 ftUS, E 2179839.784 ftUS                  Grid Convergence Angle: +1.23556045°                  Grid Scale Factor: 0.99991034</p>	<p>Survey / DLS Computation Method: Minimum Curvature / Lubinski                  Vertical Section Azimuth: 309.110°                  Vertical Section Origin: N 0.000 ft, E 0.000 ft                  TVD Reference Datum: KB                  TVD Reference Elevation: 4699.5 ft relative to MSL                  Sea Bed / Ground Level Elevation: 4718.000 ft relative to MSL                  Magnetic Declination: 11.845°                  Total Field Strength: 52961.849 nT                  Magnetic Dip: 66.094°                  Declination Date: April 05, 2010                  Magnetic Declination Model: IGRF 2005                  North Reference: True North                  Total Corr Mag North -&gt; True North: +11.845°                  Local Coordinates Referenced To: Well Head</p>
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Comments	Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Vertical Section (ft)	NS (ft)	EW (ft)	Closure (ft)	Closure Azimuth (deg)	DLS (deg/100 ft)	Tool Face (deg)	Northing (ftUS)	Easting (ftUS)
Projected-Up	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00M	7214721.54	2179839.78
Tie-In	0.50	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00	104.76M	7214721.54	2179839.78
	50.50	0.10	104.76	50.50	-0.04	-0.01	0.04	0.04	104.76	0.20	-90.77M	7214721.53	2179839.83
	100.50	0.04	269.23	100.50	-0.07	-0.02	0.07	0.07	108.55	0.28	150.22M	7214721.52	2179839.85
	150.50	0.10	150.22	150.50	-0.09	-0.06	0.07	0.09	130.41	0.25	150.31M	7214721.48	2179839.86
	200.50	0.20	150.31	200.50	-0.22	-0.17	0.14	0.22	142.02	0.20	117.46M	7214721.37	2179839.92
	250.50	0.13	117.46	250.50	-0.35	-0.28	0.23	0.36	140.27	0.23	-171.65M	7214721.27	2179840.02
	300.50	0.12	188.35	300.50	-0.43	-0.35	0.27	0.45	142.44	0.29	-132.61M	7214721.19	2179840.06
	350.50	0.05	227.39	350.50	-0.46	-0.42	0.25	0.49	149.42	0.17	-173.75M	7214721.12	2179840.04
	400.50	0.14	186.25	400.50	-0.49	-0.50	0.23	0.55	155.52	0.22	-150.09M	7214721.05	2179840.02
	450.50	0.13	209.91	450.50	-0.53	-0.61	0.19	0.64	162.51	0.11	-145.65M	7214720.94	2179839.99
	500.50	0.17	214.35	500.50	-0.55	-0.72	0.12	0.73	170.42	0.08	-97.41M	7214720.82	2179839.92
	550.50	0.12	262.59	550.50	-0.52	-0.78	0.03	0.79	178.02	0.25	-94.24M	7214720.75	2179839.83
	600.50	0.13	265.76	600.50	-0.44	-0.80	-0.08	0.80	185.84	0.02	-84.97M	7214720.74	2179839.72
	650.50	0.16	275.03	650.50	-0.34	-0.79	-0.21	0.82	194.65	0.08	-55.94M	7214720.74	2179839.59
	700.50	0.19	304.06	700.50	-0.20	-0.74	-0.35	0.82	205.01	0.18	-52.06M	7214720.79	2179839.45
	750.50	0.21	307.94	750.50	-0.02	-0.64	-0.49	0.80	217.33	0.05	-34.16M	7214720.89	2179839.31
	800.50	0.11	325.84	800.50	0.11	-0.54	-0.59	0.80	227.22	0.22	-38.89M	7214720.98	2179839.21
	850.50	0.15	321.11	850.50	0.22	-0.45	-0.65	0.79	235.37	0.08	-35.18M	7214721.07	2179839.14
	900.50	0.22	324.82	900.50	0.38	-0.32	-0.75	0.82	246.76	0.14	-34.86M	7214721.20	2179839.04
	950.50	0.24	325.14	950.50	0.57	-0.16	-0.87	0.88	259.67	0.04	-29.24M	7214721.36	2179838.92
	1000.50	0.28	330.76	1000.50	0.79	0.03	-0.99	0.99	272.02	0.09	-27.94M	7214721.55	2179838.80
	1050.50	0.31	332.06	1050.50	1.02	0.26	-1.11	1.14	283.25	0.06	-24.79M	7214721.77	2179838.67
	1100.50	0.38	335.21	1100.49	1.30	0.53	-1.24	1.35	293.16	0.14	-19.19M	7214722.04	2179838.53
	1150.50	0.47	340.81	1150.49	1.62	0.88	-1.38	1.63	302.42	0.20	-15.69M	7214722.38	2179838.39
	1200.50	0.50	344.31	1200.49	1.97	1.28	-1.50	1.97	310.37	0.08	-12.21M	7214722.78	2179838.25
	1250.50	0.50	347.79	1250.49	2.32	1.70	-1.61	2.34	316.60	0.06	-5.17M	7214723.20	2179838.14
	1300.50	0.53	354.83	1300.49	2.65	2.15	-1.68	2.72	322.00	0.14	-26.11M	7214723.65	2179838.06
	1350.50	0.55	333.89	1350.49	3.03	2.59	-1.80	3.16	325.17	0.39	-20.02M	7214724.09	2179837.93
	1400.50	0.39	339.98	1400.48	3.40	2.97	-1.97	3.56	326.46	0.33	-13.12M	7214724.46	2179837.75
	1450.50	0.45	346.88	1450.48	3.70	3.32	-2.07	3.91	328.05	0.16	-27.57M	7214724.81	2179837.64
	1500.50	0.47	332.43	1500.48	4.04	3.69	-2.21	4.30	329.10	0.23	-37.94M	7214725.18	2179837.50
	1550.50	0.32	322.06	1550.48	4.37	3.98	-2.39	4.64	329.04	0.33	-49.04M	7214725.47	2179837.31
	1600.50	0.34	310.96	1600.48	4.65	4.19	-2.59	4.92	328.30	0.13	-51.89M	7214725.67	2179837.11
	1650.50	0.32	308.11	1650.48	4.94	4.37	-2.81	5.20	327.28	0.05	-46.67M	7214725.85	2179836.88
	1700.50	0.36	313.33	1700.48	5.24	4.57	-3.03	5.48	326.41	0.10	-50.31M	7214726.04	2179836.65
	1750.50	0.40	309.69	1750.48	5.57	4.79	-3.28	5.80	325.56	0.09	-34.33M	7214726.25	2179836.40
	1800.50	0.15	325.67	1800.48	5.80	4.95	-3.45	6.04	325.11	0.52	14.20M	7214726.41	2179836.22
	1850.50	0.07	14.20	1850.48	5.88	5.04	-3.48	6.12	325.33	0.23	12.06M	7214726.50	2179836.19
	1900.50	0.17	12.06	1900.48	5.93	5.14	-3.46	6.19	326.04	0.20	88.52M	7214726.60	2179836.21
	1950.50	0.20	88.52	1950.48	5.89	5.21	-3.36	6.20	327.22	0.46	84.35M	7214726.68	2179836.32
	2000.50	0.28	84.35	2000.47	5.74	5.23	-3.15	6.10	328.94	0.16	49.50M	7214726.69	2179836.52
	2050.50	0.37	49.50	2050.47	5.62	5.34	-2.90	6.08	331.48	0.43	75.09M	7214726.82	2179836.77
	2100.50	0.37	75.09	2100.47	5.50	5.49	-2.63	6.09	334.45	0.33	106.59M	7214726.97	2179837.04
	2150.50	0.53	106.59	2150.47	5.19	5.47	-2.25	5.91	337.65	0.58	120.55M	7214726.95	2179837.42

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2200.50	0.76	120.55	2200.47	4.65	5.23	-1.74	5.51	341.60	0.55	117.20M	7214726.73	2179837.93
2250.50	0.74	117.20	2250.46	4.01	4.92	-1.17	5.05	346.64	0.10	119.89M	7214726.43	2179838.51
2300.50	1.09	119.89	2300.46	3.22	4.53	-0.47	4.55	354.10	0.71	120.73M	7214726.06	2179839.22
2350.50	1.38	120.73	2350.45	2.16	3.99	0.46	4.01	6.61	0.58	121.20M	7214725.53	2179840.16
2400.50	1.55	121.20	2400.43	0.89	3.33	1.56	3.67	25.08	0.34	121.63M	7214724.90	2179841.27
2450.50	1.66	121.63	2450.41	-0.50	2.60	2.75	3.79	46.66	0.22	133.13M	7214724.19	2179842.48
2500.50	2.02	133.13	2500.38	-2.09	1.62	4.01	4.33	68.07	1.03	141.92M	7214723.24	2179843.76
2550.50	2.83	141.92	2550.34	-4.18	0.04	5.42	5.42	89.56	1.78	146.48M	7214721.70	2179845.20
2600.50	3.03	146.48	2600.27	-6.64	-2.03	6.91	7.20	106.39	0.61	150.21M	7214719.65	2179846.73
2650.50	3.04	150.21	2650.20	-9.14	-4.28	8.30	9.34	117.31	0.40	149.31M	7214717.43	2179848.17
2700.50	2.81	149.31	2700.14	-11.53	-6.49	9.58	11.57	124.11	0.47	148.38M	7214715.26	2179849.50
2750.50	2.53	148.38	2750.08	-13.72	-8.48	10.78	13.72	128.19	0.57	144.54M	7214713.29	2179850.75
2800.50	2.32	144.54	2800.04	-15.74	-10.25	11.95	15.74	130.61	0.53	145.92M	7214711.55	2179851.95
2850.50	1.83	145.92	2850.01	-17.48	-11.73	12.98	17.50	132.10	0.99	144.10M	7214710.09	2179853.02
2900.50	1.72	144.10	2899.98	-18.97	-13.00	13.87	19.01	133.14	0.25	141.76M	7214708.84	2179853.93
2950.50	1.62	141.76	2949.96	-20.38	-14.16	14.75	20.45	133.84	0.24	139.40M	7214707.70	2179854.83
3000.50	1.29	139.40	2999.95	-21.62	-15.15	15.55	21.71	134.24	0.67	135.20M	7214706.73	2179855.66
3050.50	1.18	135.20	3049.93	-22.69	-15.94	16.28	22.79	134.39	0.28	132.20M	7214705.95	2179856.40
3100.50	1.14	132.20	3099.92	-23.70	-16.64	17.01	23.80	134.36	0.15	142.61M	7214705.27	2179857.15
3150.50	0.98	142.61	3149.91	-24.61	-17.31	17.64	24.72	134.46	0.50	138.71M	7214704.61	2179857.79
3200.50	1.02	138.71	3199.91	-25.46	-17.99	18.20	25.58	134.67	0.16	146.16M	7214703.95	2179858.36
3250.50	1.01	146.16	3249.90	-26.32	-18.69	18.73	26.46	134.93	0.26	148.10M	7214703.26	2179858.92
3300.50	1.11	148.10	3299.89	-27.20	-19.46	19.24	27.37	135.34	0.21	156.15M	7214702.49	2179859.43
3350.50	1.00	156.15	3349.88	-28.05	-20.27	19.67	28.25	135.87	0.37	158.05M	7214701.69	2179859.88
3400.50	0.87	158.05	3399.88	-28.77	-21.03	19.99	29.01	136.45	0.27	158.21M	7214700.95	2179860.22
3450.50	0.94	158.21	3449.87	-29.46	-21.76	20.28	29.74	137.01	0.14	154.15M	7214700.22	2179860.53
3500.50	1.03	154.15	3499.86	-30.23	-22.54	20.63	30.56	137.54	0.23	145.26M	7214699.45	2179860.89
3550.50	1.04	145.26	3549.85	-31.07	-23.32	21.08	31.44	137.88	0.32	151.39M	7214698.68	2179861.36
3600.50	1.11	151.39	3599.85	-31.95	-24.12	21.57	32.36	138.19	0.27	156.98M	7214697.89	2179861.87
3650.50	1.23	156.98	3649.83	-32.88	-25.04	22.02	33.34	138.68	0.33	165.44M	7214696.98	2179862.33
3700.50	1.27	165.44	3699.82	-33.80	-26.07	22.36	34.35	139.37	0.38	171.46M	7214695.96	2179862.70
3750.50	1.16	171.46	3749.81	-34.62	-27.10	22.58	35.28	140.21	0.34	163.97M	7214694.93	2179862.94
3800.50	0.99	163.97	3799.80	-35.35	-28.02	22.77	36.11	140.90	0.44	173.36M	7214694.02	2179863.15
3850.50	1.06	173.36	3849.79	-36.03	-28.90	22.95	36.90	141.55	0.36	175.39M	7214693.15	2179863.35
3900.50	1.14	175.39	3899.79	-36.71	-29.85	23.04	37.71	142.34	0.18	172.91M	7214692.19	2179863.46
3950.50	1.19	172.91	3949.78	-37.43	-30.86	23.14	38.58	143.13	0.14	178.12M	7214691.18	2179863.59
4000.50	1.38	178.12	3999.76	-38.20	-31.98	23.23	39.52	144.01	0.45	176.26M	7214690.07	2179863.69
4050.50	1.43	176.26	4049.75	-39.01	-33.20	23.29	40.56	144.95	0.14	171.09M	7214688.85	2179863.78
4100.50	1.52	171.09	4099.73	-39.93	-34.48	23.43	41.69	145.80	0.32	167.16M	7214687.57	2179863.95
4150.50	1.63	167.16	4149.71	-40.98	-35.83	23.69	42.95	146.53	0.31	164.77M	7214686.23	2179864.24
4200.50	1.58	164.77	4199.69	-42.10	-37.19	24.03	44.28	147.13	0.17	164.00M	7214684.88	2179864.61
4250.50	1.42	164.00	4249.68	-43.17	-38.45	24.38	45.53	147.62	0.32	162.07M	7214683.63	2179864.99
4300.50	1.57	162.07	4299.66	-44.26	-39.70	24.76	46.79	148.04	0.32	158.34M	7214682.39	2179865.40
4350.50	1.46	158.34	4349.64	-45.39	-40.94	25.21	48.08	148.37	0.30	163.74M	7214681.16	2179865.87
4400.50	1.45	163.74	4399.63	-46.46	-42.14	25.62	49.32	148.70	0.27	173.46M	7214679.97	2179866.31
4450.50	1.37	173.46	4449.61	-47.41	-43.34	25.87	50.47	149.17	0.50	-176.79M	7214678.77	2179866.58
4500.50	1.35	183.21	4499.60	-48.18	-44.52	25.90	51.51	149.81	0.46	-176.19M	7214677.59	2179866.64
4550.50	1.52	183.81	4549.58	-48.91	-45.77	25.83	52.55	150.57	0.34	-176.35M	7214676.34	2179866.59
4600.50	1.41	183.65	4599.56	-49.65	-47.05	25.74	53.63	151.31	0.22	177.06M	7214675.06	2179866.53
4650.50	1.47	177.06	4649.55	-50.44	-48.30	25.74	54.73	151.95	0.35	178.96M	7214673.81	2179866.55
4700.50	1.49	178.96	4699.53	-51.29	-49.59	25.78	55.89	152.53	0.11	177.91M	7214672.52	2179866.63
4750.50	1.54	177.91	4749.51	-52.15	-50.91	25.82	57.08	153.11	0.11	179.78M	7214671.20	2179866.69
4800.50	1.25	179.78	4799.50	-52.94	-52.13	25.84	58.18	153.63	0.59	179.02M	7214669.98	2179866.74
4850.50	1.35	179.02	4849.49	-53.66	-53.26	25.86	59.21	154.11	0.20	179.95M	7214668.85	2179866.78
4855.00	1.35	179.95	4853.98	-53.73	-53.37	25.86	59.30	154.15	0.49	-24.40M	7214668.74	2179866.78
4939.00	15.90	335.60	4936.99	-43.98	-43.81	21.07	48.61	154.32	20.40	0.00G	7214678.20	2179861.79
4970.00	23.10	335.50	4966.19	-34.72	-34.40	16.79	38.27	153.98	23.23	8.79G	7214687.51	2179857.31
5002.00	29.50	337.50	4994.86	-22.16	-21.39	11.16	24.13	152.44	20.19	-8.70G	7214700.39	2179851.40
5033.00	34.30	336.20	5021.17	-7.66	-6.34	4.71	7.90	143.36	15.64	-40.85G	7214715.30	2179844.63
5065.00	37.40	331.90	5047.11	9.34	10.49	-3.51	11.06	341.52	12.48	-36.01G	7214731.95	2179836.05
5097.00	41.50	327.50	5071.82	28.37	28.02	-13.79	31.22	333.80	15.50	22.92G	7214749.25	2179825.40
5128.00	47.10	330.70	5094.00	48.69	46.60	-24.87	52.82	331.91	19.45	8.24G	7214767.58	2179813.92
5160.00	53.20	331.80	5114.50	71.43	68.13	-36.67	77.37	331.71	19.24	-54.88G	7214788.85	2179801.65
5191.00	55.40	328.10	5132.59	94.96	89.91	-49.28	102.53	331.27	12.01	-8.35G	7214810.35	2179788.58
5223.00	58.30	327.60	5150.09	120.32	112.59	-63.54	129.28	330.56	9.16	-0.86G	7214832.72	2179773.84
5255.00	64.30	327.50	5165.45	146.94	136.26	-78.60	157.30	330.02	18.75	-6.28G	7214856.06	2179758.28

Tie-In

5286.00	70.30	326.80	5177.40	174.12	160.27	-94.10	185.86	329.58	19.47	0.00G	7214879.73	2179742.25
5318.00	71.00	326.80	5188.01	202.89	185.54	-110.64	216.02	329.19	2.19	39.33G	7214904.63	2179725.18
5349.00	72.40	328.00	5197.74	230.83	210.33	-126.49	245.44	328.98	5.82	9.27G	7214929.07	2179708.80
5381.00	77.80	328.90	5205.97	260.00	236.68	-142.66	276.35	328.92	17.09	7.01G	7214955.06	2179692.06
5413.00	79.40	329.10	5212.29	289.49	263.56	-158.82	307.72	328.93	5.04	15.72G	7214981.59	2179675.33
5445.00	80.10	329.30	5217.99	319.07	290.61	-174.94	339.21	328.95	2.27	4.15G	7215008.28	2179658.63
5476.00	87.00	329.80	5221.47	347.91	317.15	-190.54	369.99	329.00	22.32	-26.57G	7215034.48	2179642.46
5508.00	88.80	328.90	5222.64	377.91	344.66	-206.85	401.97	329.03	6.29	-153.45G	7215061.63	2179625.57
5540.00	88.40	328.70	5223.42	408.03	372.02	-223.42	433.96	329.01	1.40	-90.00G	7215088.62	2179608.42
5571.00	88.40	328.20	5224.29	437.27	398.43	-239.63	464.94	328.98	1.61	-146.32G	7215114.67	2179591.64
5603.00	88.10	328.00	5225.26	467.52	425.59	-256.53	496.92	328.92	1.13	-110.91G	7215141.45	2179574.16
5634.00	87.30	325.90	5226.51	497.00	451.55	-273.43	527.88	328.80	7.24	75.96G	7215167.04	2179556.71
5662.00	87.40	326.30	5227.80	523.75	474.76	-289.03	555.82	328.67	1.47	-82.71G	7215189.91	2179540.62
5693.00	87.80	323.20	5229.10	553.57	500.05	-306.90	586.72	328.46	10.07	-118.66G	7215214.81	2179522.20
5725.00	87.20	322.10	5230.50	584.65	525.47	-326.29	618.53	328.16	3.91	-60.50G	7215239.80	2179502.27
5757.00	88.90	319.10	5231.59	615.99	550.18	-346.59	650.25	327.79	10.77	-123.71G	7215264.06	2179481.44
5788.00	88.10	317.90	5232.40	646.56	573.39	-367.12	680.85	327.37	4.65	-23.20G	7215286.82	2179460.42
5820.00	89.50	317.30	5233.07	678.20	597.01	-388.70	712.39	326.93	4.76	-92.50G	7215309.97	2179438.34
5851.00	89.40	315.00	5233.36	708.97	619.36	-410.17	742.87	326.49	7.43	-121.76G	7215331.86	2179416.39
5883.00	86.50	310.30	5234.51	740.87	641.02	-433.68	773.94	325.92	17.25	-73.52G	7215353.00	2179392.42
5915.00	87.60	306.60	5236.16	772.82	660.89	-458.70	804.48	325.24	12.05	23.51G	7215372.32	2179366.98
5946.00	89.90	307.60	5236.83	803.79	679.58	-483.42	833.99	324.57	8.09	-56.30G	7215390.48	2179341.87
5978.00	91.50	305.20	5236.44	835.75	698.57	-509.17	864.44	323.91	9.01	-170.54G	7215408.90	2179315.71
6010.00	90.90	305.10	5235.77	867.67	716.99	-535.33	894.79	323.25	1.90	26.55G	7215426.75	2179289.17
6041.00	91.70	305.50	5235.07	898.59	734.90	-560.63	924.32	322.66	2.89	-84.27G	7215444.11	2179263.49
6073.00	91.80	304.50	5234.09	930.49	753.24	-586.83	954.85	322.08	3.14	-133.59G	7215461.88	2179236.91
6105.00	89.80	302.40	5233.64	962.33	770.88	-613.52	985.22	321.48	9.06	-172.15G	7215478.94	2179209.84
6136.00	86.90	302.00	5234.54	993.09	787.39	-639.74	1014.52	320.91	9.44	180.00G	7215494.88	2179183.28
6167.00	83.60	302.00	5237.10	1023.74	803.76	-665.93	1043.79	320.36	10.65	-167.57G	7215510.68	2179156.74
6199.00	82.70	301.80	5240.92	1055.26	820.55	-692.91	1073.97	319.82	2.88	-15.59G	7215526.88	2179129.41
6231.00	87.00	300.60	5243.79	1086.82	837.05	-720.16	1104.21	319.29	13.95	39.28G	7215542.79	2179101.81
6263.00	88.10	301.50	5245.16	1118.48	853.54	-747.55	1134.62	318.79	4.44	-19.98G	7215558.68	2179074.07
6294.00	89.20	301.10	5245.89	1149.18	869.64	-774.03	1164.22	318.33	3.78	75.97G	7215574.21	2179047.25
6326.00	89.40	301.90	5246.28	1180.89	886.36	-801.31	1194.88	317.88	2.58	-129.81G	7215590.33	2179019.62
6358.00	88.90	301.30	5246.76	1212.62	903.13	-828.57	1225.63	317.47	2.44	-148.01G	7215606.51	2178992.01
6389.00	88.10	300.80	5247.57	1243.30	919.11	-855.11	1255.38	317.07	3.04	-135.06G	7215621.91	2178965.13
6421.00	86.70	299.40	5249.02	1274.87	935.14	-882.77	1285.99	316.65	6.18	-79.41G	7215637.34	2178937.14
6455.00	87.00	297.80	5250.89	1308.25	951.39	-912.57	1318.31	316.19	4.78	-90.00G	7215652.94	2178906.99
6484.00	87.00	297.50	5252.41	1336.63	964.83	-938.23	1345.80	315.80	1.03	6.01G	7215665.83	2178881.06
6516.00	90.80	297.90	5253.02	1367.99	979.70	-966.55	1376.24	315.39	11.94	-135.00G	7215680.08	2178852.42
6580.00	90.00	297.10	5252.57	1430.68	1009.25	-1023.32	1437.28	314.60	1.77	-108.43G	7215708.40	2178795.04
6612.00	89.90	296.80	5252.60	1461.96	1023.75	-1051.84	1467.80	314.22	0.99	63.44G	7215722.28	2178766.21
6643.00	90.00	297.00	5252.63	1492.26	1037.78	-1079.49	1497.42	313.87	0.72	132.72G	7215735.71	2178738.27
6670.00	88.80	298.30	5252.91	1518.72	1050.31	-1103.40	1523.37	313.59	6.55	-108.45G	7215747.71	2178714.09
6702.00	88.60	297.70	5253.64	1550.11	1065.33	-1131.65	1554.20	313.27	1.98	-127.90G	7215762.12	2178685.53
6733.00	87.90	296.80	5254.58	1580.43	1079.51	-1159.19	1584.01	312.96	3.68	-159.00G	7215775.71	2178657.69
6771.00	86.60	296.30	5256.41	1617.48	1096.48	-1193.15	1620.45	312.58	3.66	24.77G	7215791.94	2178623.38
6797.00	87.90	296.90	5257.65	1642.83	1108.11	-1216.37	1645.43	312.33	5.51	42.53G	7215803.06	2178599.92
6828.00	90.30	299.10	5258.14	1673.24	1122.66	-1243.73	1675.48	312.07	10.50	123.69G	7215817.02	2178572.25
6860.00	90.10	299.40	5258.03	1704.77	1138.29	-1271.65	1706.70	311.83	1.13	173.99G	7215832.04	2178544.00
6892.00	88.20	299.60	5258.50	1736.32	1154.05	-1299.50	1737.97	311.61	5.97	-7.12G	7215847.19	2178515.82
6924.00	89.00	299.50	5259.29	1767.86	1169.83	-1327.33	1769.26	311.39	2.52	18.43G	7215862.37	2178487.66
6955.00	89.30	299.60	5259.75	1798.43	1185.11	-1354.29	1799.61	311.19	1.02	99.48G	7215877.07	2178460.38
6987.00	89.00	301.40	5260.22	1830.06	1201.35	-1381.86	1831.06	311.00	5.70	180.00G	7215892.70	2178432.47
7023.00	87.20	301.40	5261.41	1865.72	1220.10	-1412.57	1866.54	310.82	5.00	-130.66G	7215910.78	2178401.37
7054.00	86.60	300.70	5263.09	1896.36	1236.06	-1439.09	1897.06	310.66	2.97	145.09G	7215926.17	2178374.51
7086.00	85.60	301.40	5265.27	1927.97	1252.53	-1466.44	1928.54	310.50	3.81	-38.62G	7215942.04	2178346.81
7118.00	86.60	300.60	5267.44	1959.58	1268.97	-1493.81	1960.04	310.35	4.00	2.73G	7215957.89	2178319.10
7150.00	90.80	300.80	5268.17	1991.22	1285.30	-1521.31	1991.58	310.19	13.14	158.96G	7215973.62	2178291.26
7176.00	89.50	301.30	5268.10	2016.96	1298.71	-1543.58	2017.25	310.08	5.36	71.56G	7215986.55	2178268.70
7208.00	91.20	306.40	5267.91	2048.82	1316.53	-1570.15	2049.05	309.98	16.80	136.08G	7216003.79	2178241.76
7239.00	88.50	309.00	5267.99	2079.80	1335.48	-1594.67	2080.02	309.95	12.09	-71.56G	7216022.20	2178216.84
7271.00	88.60	308.70	5268.80	2111.79	1355.55	-1619.58	2112.01	309.93	0.99	53.13G	7216041.73	2178191.50
7303.00	88.90	309.10	5269.49	2143.78	1375.64	-1644.48	2143.99	309.91	1.56	90.00G	7216061.27	2178166.18
7335.00	88.90	309.90	5270.11	2175.78	1395.99	-1669.17	2175.99	309.91	2.50	-63.44G	7216081.09	2178141.06
7366.00	89.10	309.50	5270.65	2206.77	1415.79	-1693.02	2206.98	309.90	1.44	-90.00G	7216100.36	2178116.79

Tie-In

NS EW

7398.00	89.10	309.40	5271.15	2238.76	1436.12	-1717.72	2238.98	309.90	0.31	-18.43G	7216120.16	2178091.65
7430.00	89.70	309.20	5271.49	2270.76	1456.39	-1742.48	2270.97	309.89	1.98	-26.57G	7216139.88	2178066.46
7461.00	89.90	309.10	5271.60	2301.76	1475.96	-1766.52	2301.97	309.88	0.72	-143.13G	7216158.93	2178042.01
7493.00	89.10	308.50	5271.88	2333.76	1496.01	-1791.46	2333.96	309.86	3.12	-140.21G	7216178.43	2178016.65
7524.00	88.50	308.00	5272.52	2364.75	1515.20	-1815.80	2364.94	309.84	2.52	90.00G	7216197.09	2177991.90
7556.00	88.50	308.10	5273.36	2396.73	1534.91	-1840.99	2396.92	309.82	0.31	-26.56G	7216216.26	2177966.29
7588.00	88.70	308.00	5274.14	2428.72	1554.63	-1866.18	2428.89	309.80	0.70	-33.69G	7216235.43	2177940.69
7620.00	89.00	307.80	5274.79	2460.70	1574.28	-1891.43	2460.87	309.77	1.13	85.61G	7216254.53	2177915.02
7651.00	89.10	309.10	5275.30	2491.70	1593.56	-1915.70	2491.85	309.75	4.21	-78.12G	7216273.27	2177890.34
7683.00	89.50	307.20	5275.69	2523.69	1613.32	-1940.86	2523.84	309.73	6.07	108.44G	7216292.49	2177864.76
7715.00	89.40	307.50	5276.00	2555.67	1632.73	-1966.30	2555.81	309.70	0.99	-150.95G	7216311.35	2177838.92
7747.00	88.50	307.00	5276.58	2587.65	1652.10	-1991.77	2587.77	309.67	3.22	-90.00G	7216330.16	2177813.04
7778.00	88.50	306.50	5277.40	2618.61	1670.64	-2016.60	2618.72	309.64	1.61	-21.80G	7216348.16	2177787.82
7810.00	89.00	306.30	5278.09	2650.57	1689.63	-2042.35	2650.67	309.60	1.68	-26.56G	7216366.58	2177761.67
7842.00	89.20	306.20	5278.60	2682.53	1708.55	-2068.15	2682.61	309.56	0.70	0.00G	7216384.94	2177735.46
7873.00	89.20	306.20	5279.03	2713.48	1726.85	-2093.17	2713.55	309.52	0.00	-157.64G	7216402.70	2177710.06
7905.00	87.50	305.50	5279.95	2745.42	1745.59	-2119.09	2745.47	309.48	5.74	-135.03G	7216420.87	2177683.74
7937.00	87.40	305.40	5281.37	2777.32	1764.13	-2145.13	2777.36	309.43	0.44	47.73G	7216438.84	2177657.31
7968.00	88.40	306.50	5282.51	2808.25	1782.31	-2170.21	2808.28	309.39	4.79	12.53G	7216456.48	2177631.85
8031.00	90.20	306.90	5283.28	2871.19	1819.96	-2220.72	2871.21	309.34	2.93	-90.00G	7216493.03	2177580.55
8094.00	90.20	306.30	5283.06	2934.13	1857.52	-2271.29	2934.14	309.28	0.95	168.24G	7216529.49	2177529.18
8126.00	87.80	306.80	5283.62	2966.09	1876.57	-2297.00	2966.10	309.25	7.66	-143.16G	7216547.98	2177503.07
8158.00	87.40	306.50	5284.96	2998.03	1895.66	-2322.65	2998.03	309.22	1.56	-132.05G	7216566.50	2177477.02
8189.00	86.50	305.50	5286.61	3028.94	1913.85	-2347.69	3028.94	309.19	4.34	6.33G	7216584.15	2177451.59
8221.00	87.40	305.60	5288.31	3060.83	1932.43	-2373.69	3060.83	309.15	2.83	0.00G	7216602.16	2177425.20
<i>8255.00</i>	<i>87.40</i>	<i>305.60</i>	<i>5289.85</i>	<i>3094.73</i>	<i>1952.20</i>	<i>-2401.31</i>	<i>3094.73</i>	<i>309.11</i>	<i>0.00</i>	<i>0.00G</i>	<i>7216621.33</i>	<i>2177397.17</i>

Last Survey  
To MD

**Survey Type:** Non-Def Survey

**Survey Error Model:** SLB ISCWSA version 22 \*\*\* 3-D 95.00% Confidence 2.7955 sigma

**Surveying Prog:**

**MD From ( ft )**

-18.50

0.00

4850.50

7150.00

**MD To ( ft )**

0.00

4850.50

7150.00

8221.00

**EOU Freq Survey Tool Type**

Act-Stns SLB\_CNSG+CASING

Act-Stns SLB\_CNSG+CASING

Act-Stns SLB\_MWD-STD

Act-Stns SLB\_MWD-STD

**Borehole -> Survey**

Original Hole -> GHU 9 Field Gyro Survey

Original Hole -> GHU 9 Field Gyro Survey

Lateral 1 -> GH 9 Lateral #1 NW Field Survey

ST1 off Lat 1 -> GH 9 - ST1 off Lat 1 - Field Survey

*\*Italicized stations are NOT used in position calculations.*

# GH 9 Lateral #2 SE Field Survey Survey Report

<p>Report Date: June 22, 2010                  Client: QEP ENERGY                  Field: Uinta                  Structure / Slot: Gypsum Hills / GHU 9                  Well: GH 9                  Borehole: Lateral 2                  UWI/API#:                   Survey Name / Date: GH 9 Lateral #2 SE Field Survey / April 9, 2010                  Tort / AHD / DDI / ERD ratio: 206.196° / 2811.88 ft / 5.935 / 0.541                  Grid Coordinate System: NAD83 Utah State Planes, Central Zone, US Feet                  Location Lat/Long: N 40 6 37.120, W 109 34 16.250                  Location Grid N/E Y/X: N 7214721.537 ftUS, E 2179839.784 ftUS                  Grid Convergence Angle: +1.23556045°                  Grid Scale Factor: 0.99991034</p>	<p>Survey / DLS Computation Method: Minimum Curvature / Lubinski                  Vertical Section Azimuth: 144.060°                  Vertical Section Origin: N 0.000 ft, E 0.000 ft                  TVD Reference Datum: KB                  TVD Reference Elevation: 4699.5 ft relative to MSL                  Sea Bed / Ground Level Elevation: 4718.000 ft relative to MSL                  Magnetic Declination: 11.844°                  Total Field Strength: 52960.801 nT                  Magnetic Dip: 66.094°                  Declination Date: April 09, 2010                  Magnetic Declination Model: IGRF 2005                  North Reference: True North                  Total Corr Mag North -&gt; True North: +11.844°                  Local Coordinates Referenced To: Well Head</p>
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Comments	Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Vertical Section (ft)	NS (ft)	EW (ft)	Closure (ft)	Closure Azimuth (deg)	DLS (deg/100 ft)	Tool Face (deg)	Northing (ftUS)	Easting (ftUS)
Projected-Up	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00M	7214721.54	2179839.78
Tie-In	0.50	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00	104.76M	7214721.54	2179839.78
	50.50	0.10	104.76	50.50	0.03	-0.01	0.04	0.04	104.76	0.20	-90.77M	7214721.53	2179839.83
	100.50	0.04	269.23	100.50	0.06	-0.02	0.07	0.07	108.55	0.28	150.22M	7214721.52	2179839.85
	150.50	0.10	150.22	150.50	0.09	-0.06	0.07	0.09	130.41	0.25	150.31M	7214721.48	2179839.86
	200.50	0.20	150.31	200.50	0.22	-0.17	0.14	0.22	142.02	0.20	117.46M	7214721.37	2179839.92
	250.50	0.13	117.46	250.50	0.36	-0.28	0.23	0.36	140.27	0.23	-171.65M	7214721.27	2179840.02
	300.50	0.12	188.35	300.50	0.45	-0.35	0.27	0.45	142.44	0.29	-132.61M	7214721.19	2179840.06
	350.50	0.05	227.39	350.50	0.49	-0.42	0.25	0.49	149.42	0.17	-173.75M	7214721.12	2179840.04
	400.50	0.14	186.25	400.50	0.53	-0.50	0.23	0.55	155.52	0.22	-150.09M	7214721.05	2179840.02
	450.50	0.13	209.91	450.50	0.60	-0.61	0.19	0.64	162.51	0.11	-145.65M	7214720.94	2179839.99
	500.50	0.17	214.35	500.50	0.65	-0.72	0.12	0.73	170.42	0.08	-97.41M	7214720.82	2179839.92
	550.50	0.12	262.59	550.50	0.65	-0.78	0.03	0.79	178.02	0.25	-94.24M	7214720.75	2179839.83
	600.50	0.13	265.76	600.50	0.60	-0.80	-0.08	0.80	185.84	0.02	-84.97M	7214720.74	2179839.72
	650.50	0.16	275.03	650.50	0.52	-0.79	-0.21	0.82	194.65	0.08	-55.94M	7214720.74	2179839.59
	700.50	0.19	304.06	700.50	0.40	-0.74	-0.35	0.82	205.01	0.18	-52.06M	7214720.79	2179839.45
	750.50	0.21	307.94	750.50	0.23	-0.64	-0.49	0.80	217.33	0.05	-34.16M	7214720.89	2179839.31
	800.50	0.11	325.84	800.50	0.10	-0.54	-0.59	0.80	227.22	0.22	-38.89M	7214720.98	2179839.21
	850.50	0.15	321.11	850.50	-0.02	-0.45	-0.65	0.79	235.37	0.08	-35.18M	7214721.07	2179839.14
	900.50	0.22	324.82	900.50	-0.18	-0.32	-0.75	0.82	246.76	0.14	-34.86M	7214721.20	2179839.04
	950.50	0.24	325.14	950.50	-0.38	-0.16	-0.87	0.88	259.67	0.04	-29.24M	7214721.36	2179838.92
	1000.50	0.28	330.76	1000.50	-0.61	0.03	-0.99	0.99	272.02	0.09	-27.94M	7214721.55	2179838.80
	1050.50	0.31	332.06	1050.50	-0.86	0.26	-1.11	1.14	283.25	0.06	-24.79M	7214721.77	2179838.67
	1100.50	0.38	335.21	1100.49	-1.16	0.53	-1.24	1.35	293.16	0.14	-19.19M	7214722.04	2179838.53
	1150.50	0.47	340.81	1150.49	-1.52	0.88	-1.38	1.63	302.42	0.20	-15.69M	7214722.38	2179838.39
	1200.50	0.50	344.31	1200.49	-1.92	1.28	-1.50	1.97	310.37	0.08	-12.21M	7214722.78	2179838.25
	1250.50	0.50	347.79	1250.49	-2.32	1.70	-1.61	2.34	316.60	0.06	-5.17M	7214723.20	2179838.14
	1300.50	0.53	354.83	1300.49	-2.72	2.15	-1.68	2.72	322.00	0.14	-26.11M	7214723.65	2179838.06
	1350.50	0.55	333.89	1350.49	-3.16	2.59	-1.80	3.16	325.17	0.39	-20.02M	7214724.09	2179837.93
	1400.50	0.39	339.98	1400.48	-3.56	2.97	-1.97	3.56	326.46	0.33	-13.12M	7214724.46	2179837.75
	1450.50	0.45	346.88	1450.48	-3.90	3.32	-2.07	3.91	328.05	0.16	-27.57M	7214724.81	2179837.64
	1500.50	0.47	332.43	1500.48	-4.28	3.69	-2.21	4.30	329.10	0.23	-37.94M	7214725.18	2179837.50
	1550.50	0.32	322.06	1550.48	-4.63	3.98	-2.39	4.64	329.04	0.33	-49.04M	7214725.47	2179837.31
	1600.50	0.34	310.96	1600.48	-4.91	4.19	-2.59	4.92	328.30	0.13	-51.89M	7214725.67	2179837.11
	1650.50	0.32	308.11	1650.48	-5.19	4.37	-2.81	5.20	327.28	0.05	-46.67M	7214725.85	2179836.88
	1700.50	0.36	313.33	1700.48	-5.48	4.57	-3.03	5.48	326.41	0.10	-50.31M	7214726.04	2179836.65
	1750.50	0.40	309.69	1750.48	-5.80	4.79	-3.28	5.80	325.56	0.09	-34.33M	7214726.25	2179836.40
	1800.50	0.15	325.67	1800.48	-6.04	4.95	-3.45	6.04	325.11	0.52	14.20M	7214726.41	2179836.22
	1850.50	0.07	14.20	1850.48	-6.12	5.04	-3.48	6.12	325.33	0.23	12.06M	7214726.50	2179836.19
	1900.50	0.17	12.06	1900.48	-6.19	5.14	-3.46	6.19	326.04	0.20	88.52M	7214726.60	2179836.21
	1950.50	0.20	88.52	1950.48	-6.19	5.21	-3.36	6.20	327.22	0.46	84.35M	7214726.68	2179836.32
	2000.50	0.28	84.35	2000.47	-6.08	5.23	-3.15	6.10	328.94	0.16	49.50M	7214726.69	2179836.52
	2050.50	0.37	49.50	2050.47	-6.03	5.34	-2.90	6.08	331.48	0.43	75.09M	7214726.82	2179836.77
	2100.50	0.37	75.09	2100.47	-5.99	5.49	-2.63	6.09	334.45	0.33	106.59M	7214726.97	2179837.04
	2150.50	0.53	106.59	2150.47	-5.74	5.47	-2.25	5.91	337.65	0.58	120.55M	7214726.95	2179837.42

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 DIV. OF OIL, GAS & MINING

2200.50	0.76	120.55	2200.47	-5.26	5.23	-1.74	5.51	341.60	0.55	117.20M	7214726.73	2179837.93
2250.50	0.74	117.20	2250.46	-4.66	4.92	-1.17	5.05	346.64	0.10	119.89M	7214726.43	2179838.51
2300.50	1.09	119.89	2300.46	-3.94	4.53	-0.47	4.55	354.10	0.71	120.73M	7214726.06	2179839.22
2350.50	1.38	120.73	2350.45	-2.96	3.99	0.46	4.01	6.61	0.58	121.20M	7214725.53	2179840.16
2400.50	1.55	121.20	2400.43	-1.78	3.33	1.56	3.67	25.08	0.34	121.63M	7214724.90	2179841.27
2450.50	1.66	121.63	2450.41	-0.49	2.60	2.75	3.79	46.66	0.22	133.13M	7214724.19	2179842.48
2500.50	2.02	133.13	2500.38	1.05	1.62	4.01	4.33	68.07	1.03	141.92M	7214723.24	2179843.76
2550.50	2.83	141.92	2550.34	3.15	0.04	5.42	5.42	89.56	1.78	146.48M	7214721.70	2179845.20
2600.50	3.03	146.48	2600.27	5.70	-2.03	6.91	7.20	106.39	0.61	150.21M	7214719.65	2179846.73
2650.50	3.04	150.21	2650.20	8.34	-4.28	8.30	9.34	117.31	0.40	149.31M	7214717.43	2179848.17
2700.50	2.81	149.31	2700.14	10.88	-6.49	9.58	11.57	124.11	0.47	148.38M	7214715.26	2179849.50
2750.50	2.53	148.38	2750.08	13.20	-8.48	10.78	13.72	128.19	0.57	144.54M	7214713.29	2179850.75
2800.50	2.32	144.54	2800.04	15.31	-10.25	11.95	15.74	130.61	0.53	145.92M	7214711.55	2179851.95
2850.50	1.83	145.92	2850.01	17.12	-11.73	12.98	17.50	132.10	0.99	144.10M	7214710.09	2179853.02
2900.50	1.72	144.10	2899.98	18.67	-13.00	13.87	19.01	133.14	0.25	141.76M	7214708.84	2179853.93
2950.50	1.62	141.76	2949.96	20.12	-14.16	14.75	20.45	133.84	0.24	139.40M	7214707.70	2179854.83
3000.50	1.29	139.40	2999.95	21.39	-15.15	15.55	21.71	134.24	0.67	135.20M	7214706.73	2179855.66
3050.50	1.18	135.20	3049.93	22.46	-15.94	16.28	22.79	134.39	0.28	132.20M	7214705.95	2179856.40
3100.50	1.14	132.20	3099.92	23.46	-16.64	17.01	23.80	134.36	0.15	142.61M	7214705.27	2179857.15
3150.50	0.98	142.61	3149.91	24.37	-17.31	17.64	24.72	134.46	0.50	138.71M	7214704.61	2179857.79
3200.50	1.02	138.71	3199.91	25.24	-17.99	18.20	25.58	134.67	0.16	146.16M	7214703.95	2179858.36
3250.50	1.01	146.16	3249.90	26.13	-18.69	18.73	26.46	134.93	0.26	148.10M	7214703.26	2179858.92
3300.50	1.11	148.10	3299.89	27.05	-19.46	19.24	27.37	135.34	0.21	156.15M	7214702.49	2179859.43
3350.50	1.00	156.15	3349.88	27.96	-20.27	19.67	28.25	135.87	0.37	158.05M	7214701.69	2179859.88
3400.50	0.87	158.05	3399.88	28.75	-21.03	19.99	29.01	136.45	0.27	158.21M	7214700.95	2179860.22
3450.50	0.94	158.21	3449.87	29.52	-21.76	20.28	29.74	137.01	0.14	154.15M	7214700.22	2179860.53
3500.50	1.03	154.15	3499.86	30.36	-22.54	20.63	30.56	137.54	0.23	145.26M	7214699.45	2179860.89
3550.50	1.04	145.26	3549.85	31.26	-23.32	21.08	31.44	137.88	0.32	151.39M	7214698.68	2179861.36
3600.50	1.11	151.39	3599.85	32.19	-24.12	21.57	32.36	138.19	0.27	156.98M	7214697.89	2179861.87
3650.50	1.23	156.98	3649.83	33.19	-25.04	22.02	33.34	138.68	0.33	165.44M	7214696.98	2179862.33
3700.50	1.27	165.44	3699.82	34.23	-26.07	22.36	34.35	139.37	0.38	171.46M	7214695.96	2179862.70
3750.50	1.16	171.46	3749.81	35.20	-27.10	22.58	35.28	140.21	0.34	163.97M	7214694.93	2179862.94
3800.50	0.99	163.97	3799.80	36.05	-28.02	22.77	36.11	140.90	0.44	173.36M	7214694.02	2179863.15
3850.50	1.06	173.36	3849.79	36.86	-28.90	22.95	36.90	141.55	0.36	175.39M	7214693.15	2179863.35
3900.50	1.14	175.39	3899.79	37.69	-29.85	23.04	37.71	142.34	0.18	172.91M	7214692.19	2179863.46
3950.50	1.19	172.91	3949.78	38.57	-30.86	23.14	38.58	143.13	0.14	178.12M	7214691.18	2179863.59
4000.50	1.38	178.12	3999.76	39.52	-31.98	23.23	39.52	144.01	0.45	176.26M	7214690.07	2179863.69
4050.50	1.43	176.26	4049.75	40.55	-33.20	23.29	40.56	144.95	0.14	171.09M	7214688.85	2179863.78
4100.50	1.52	171.09	4099.73	41.67	-34.48	23.43	41.69	145.80	0.32	167.16M	7214687.57	2179863.95
4150.50	1.63	167.16	4149.71	42.91	-35.83	23.69	42.95	146.53	0.31	164.77M	7214686.23	2179864.24
4200.50	1.58	164.77	4199.69	44.21	-37.19	24.03	44.28	147.13	0.17	164.00M	7214684.88	2179864.61
4250.50	1.42	164.00	4249.68	45.44	-38.45	24.38	45.53	147.62	0.32	162.07M	7214683.63	2179864.99
4300.50	1.57	162.07	4299.66	46.67	-39.70	24.76	46.79	148.04	0.32	158.34M	7214682.39	2179865.40
4350.50	1.46	158.34	4349.64	47.94	-40.94	25.21	48.08	148.37	0.30	163.74M	7214681.16	2179865.87
4400.50	1.45	163.74	4399.63	49.16	-42.14	25.62	49.32	148.70	0.27	173.46M	7214679.97	2179866.31
4450.50	1.37	173.46	4449.61	50.27	-43.34	25.87	50.47	149.17	0.50	-176.79M	7214678.77	2179866.58
4500.50	1.35	183.21	4499.60	51.25	-44.52	25.90	51.51	149.81	0.46	-176.19M	7214677.59	2179866.64
4550.50	1.52	183.81	4549.58	52.22	-45.77	25.83	52.55	150.57	0.34	-176.35M	7214676.34	2179866.59
4600.50	1.41	183.85	4599.56	53.20	-47.05	25.74	53.63	151.31	0.22	177.06M	7214675.06	2179866.53
4650.50	1.47	177.06	4649.55	54.21	-48.30	25.74	54.73	151.95	0.35	178.96M	7214673.81	2179866.55
4700.50	1.49	178.96	4699.53	55.28	-49.59	25.78	55.89	152.53	0.11	177.91M	7214672.52	2179866.63
4750.50	1.54	177.91	4749.51	56.37	-50.91	25.82	57.08	153.11	0.11	110.80M	7214671.20	2179866.69
4875.00	21.90	110.80	4870.91	77.42	-60.95	47.84	77.48	141.87	17.15	6.72G	7214661.64	2179888.92
4907.00	28.90	112.50	4899.80	89.02	-66.03	60.58	89.61	137.47	21.99	53.36G	7214656.83	2179901.77
4939.00	30.30	116.10	4927.62	102.74	-72.54	74.97	104.32	134.06	7.07	128.03G	7214650.64	2179916.30
4970.00	29.40	118.50	4954.51	116.51	-79.61	88.68	119.18	131.92	4.82	-3.17G	7214643.86	2179930.16
5002.00	32.30	118.20	4981.98	131.29	-87.40	103.12	135.18	130.28	9.08	-16.22G	7214636.39	2179944.76
5034.00	36.40	116.20	5008.39	147.39	-95.64	119.19	152.81	128.74	13.29	-4.44G	7214628.50	2179960.99
5065.00	40.60	115.70	5032.65	164.40	-104.08	136.54	171.68	127.32	13.59	37.06G	7214620.44	2179978.52
5097.00	44.90	120.20	5056.15	183.91	-114.28	155.69	193.13	126.28	16.48	47.04G	7214610.65	2179997.89
5129.00	50.30	127.40	5077.73	206.06	-127.46	175.26	216.71	126.03	23.66	36.32G	7214597.90	2180017.74
5160.00	54.70	131.30	5096.60	229.84	-143.06	194.25	241.25	126.37	17.35	32.18G	7214582.71	2180037.06
5192.00	58.10	133.80	5114.31	255.96	-161.09	213.87	267.75	126.99	12.46	26.36G	7214565.11	2180057.06
5223.00	61.30	135.60	5129.95	282.36	-179.92	232.89	294.29	127.69	11.47	38.87G	7214546.70	2180076.48
5255.00	64.70	138.60	5144.48	310.65	-200.81	252.29	322.45	128.52	13.51	53.49G	7214526.24	2180096.32
5287.00	66.70	141.50	5157.65	339.74	-223.16	271.01	351.06	129.47	10.36	59.28G	7214504.29	2180115.51

Tie-In

5318.00	67.70	143.30	5169.66	368.31	-245.80	288.44	378.97	130.44	6.25	3.89G	7214482.03	2180133.43
5350.00	71.90	143.60	5180.71	398.33	-269.93	306.32	408.28	131.39	13.15	12.77G	7214458.30	2180151.82
5381.00	78.40	145.10	5188.65	428.28	-294.26	323.77	437.51	132.27	21.48	-3.22G	7214434.35	2180169.79
5413.00	83.70	144.80	5193.63	459.87	-320.13	341.92	468.39	133.12	16.59	-16.34G	7214408.88	2180188.49
5445.00	85.40	144.30	5196.67	491.73	-346.08	360.39	499.65	133.84	5.54	-15.94G	7214383.34	2180207.52
5476.00	87.50	143.70	5198.59	522.66	-371.11	378.58	530.14	134.43	7.04	-4.40G	7214358.71	2180226.24
5508.00	91.40	143.40	5198.89	554.66	-396.84	397.58	561.75	134.95	12.22	-71.56G	7214333.39	2180245.80
5540.00	91.50	143.10	5198.08	586.64	-422.48	416.72	593.42	135.39	0.99	-126.87G	7214308.18	2180265.48
5571.00	91.20	142.70	5197.35	617.63	-447.19	435.42	624.16	135.76	1.61	-56.30G	7214283.88	2180284.70
5603.00	91.40	142.40	5196.63	649.61	-472.59	454.87	655.94	136.09	1.13	126.87G	7214258.91	2180304.70
5635.00	91.10	142.80	5195.93	681.59	-498.01	474.30	687.73	136.40	1.56	-69.43G	7214233.92	2180324.67
5666.00	91.40	142.00	5195.25	712.57	-522.56	493.21	718.56	136.66	2.76	-119.05G	7214209.78	2180344.10
5698.00	90.90	141.10	5194.61	744.53	-547.62	513.11	750.44	136.86	3.22	172.88G	7214185.16	2180364.53
5730.00	90.10	141.20	5194.33	776.49	-572.54	533.18	782.36	137.04	2.52	-160.56G	7214160.88	2180385.14
5761.00	88.40	140.60	5194.74	807.44	-596.59	552.73	813.28	137.19	5.82	146.33G	7214137.06	2180405.20
5793.00	88.10	140.80	5195.71	839.37	-621.34	572.99	845.21	137.32	1.13	-77.48G	7214112.75	2180425.98
5800.00	88.30	139.90	5195.93	846.35	-626.73	577.45	852.20	137.34	13.16	38.66G	7214107.46	2180430.56
5832.00	89.30	140.70	5196.60	878.27	-651.35	597.89	884.15	137.45	4.00	21.37G	7214083.29	2180451.52
5863.00	91.60	141.60	5196.36	909.23	-675.49	617.33	915.08	137.58	7.97	0.00G	7214059.58	2180471.48
5895.00	94.20	141.60	5194.74	941.16	-700.53	637.18	946.96	137.71	8.12	18.37G	7214034.97	2180491.86
5927.00	95.10	141.90	5192.15	973.02	-725.58	656.93	978.78	137.84	2.96	90.00G	7214010.36	2180512.14
5959.00	95.10	144.00	5189.30	1004.89	-751.01	676.13	1010.53	138.00	6.54	135.09G	7213985.34	2180531.89
5990.00	94.80	144.30	5186.63	1035.77	-776.05	694.22	1041.24	138.19	1.37	158.21G	7213960.71	2180550.51
6022.00	92.80	145.10	5184.51	1067.70	-802.10	712.67	1072.97	138.38	6.73	143.15G	7213935.06	2180569.51
6054.00	92.40	145.40	5183.06	1099.66	-828.37	730.89	1104.71	138.58	1.56	-141.34G	7213909.19	2180588.29
6085.00	91.40	144.60	5182.03	1130.64	-853.75	748.66	1135.51	138.75	4.13	107.63G	7213884.21	2180606.61
6117.00	90.70	146.80	5181.44	1162.62	-880.18	766.69	1167.27	138.94	7.21	14.03G	7213858.17	2180625.20
6149.00	91.10	146.90	5180.94	1194.58	-906.97	784.18	1198.97	139.15	1.29	-38.65G	7213831.77	2180643.27
6180.00	91.60	146.50	5180.21	1225.53	-932.87	801.20	1229.70	139.34	2.07	74.03G	7213806.24	2180660.84
6212.00	92.00	147.90	5179.20	1257.47	-959.75	818.52	1261.39	139.54	4.55	0.00G	7213779.74	2180678.74
6244.00	93.10	147.90	5177.78	1289.37	-986.83	835.51	1293.03	139.75	3.44	29.69G	7213753.04	2180696.30
6275.00	93.80	148.30	5175.91	1320.23	-1013.10	851.86	1323.65	139.94	2.60	158.21G	7213727.13	2180713.21
6307.00	92.30	148.90	5174.21	1352.09	-1040.38	868.51	1355.25	140.14	5.05	-90.00G	7213700.22	2180730.44
6339.00	92.30	148.50	5172.93	1383.95	-1067.70	885.12	1386.87	140.34	1.25	164.05G	7213673.27	2180747.64
6371.00	90.90	148.90	5172.03	1415.84	-1095.03	901.74	1418.53	140.53	4.55	-171.87G	7213646.30	2180764.84
6403.00	88.80	148.60	5172.12	1447.73	-1122.39	918.34	1450.21	140.71	6.63	156.39G	7213619.32	2180782.03
6434.00	87.20	149.30	5173.20	1478.59	-1148.93	934.32	1480.87	140.88	5.63	-63.42G	7213593.13	2180798.57
6466.00	87.40	148.90	5174.71	1510.44	-1176.35	950.73	1512.52	141.05	1.40	-150.32G	7213566.06	2180815.57
6497.00	86.00	148.10	5176.49	1541.29	-1202.74	966.90	1543.21	141.20	5.20	-20.85G	7213540.03	2180832.31
6529.00	88.10	147.30	5178.14	1573.18	-1229.75	983.98	1574.96	141.34	7.02	-5.20G	7213513.40	2180849.96
6561.00	90.30	147.10	5178.59	1605.13	-1256.65	1001.31	1606.79	141.45	6.90	-36.87G	7213486.89	2180867.86
6593.00	91.10	146.50	5178.19	1637.09	-1283.42	1018.83	1638.65	141.56	3.12	-9.46G	7213460.50	2180885.96
6618.00	91.70	146.40	5177.58	1662.06	-1304.25	1032.64	1663.56	141.63	2.43	-11.30G	7213439.98	2180900.21
6650.00	92.20	146.30	5176.49	1694.02	-1330.87	1050.37	1695.43	141.72	1.59	-44.98G	7213413.74	2180918.50
6680.00	92.30	146.20	5175.32	1723.97	-1355.80	1067.02	1725.32	141.80	0.47	0.00G	7213389.19	2180935.69
6712.00	92.90	146.20	5173.87	1755.91	-1382.36	1084.80	1757.19	141.88	1.87	-56.27G	7213363.01	2180954.04
6744.00	93.10	145.90	5172.19	1787.85	-1408.87	1102.65	1789.06	141.95	1.13	40.53G	7213336.90	2180972.45
6775.00	93.80	146.50	5170.32	1818.77	-1434.58	1119.86	1819.92	142.02	2.97	80.50G	7213311.56	2180990.21
6807.00	93.90	147.10	5168.18	1850.66	-1461.30	1137.35	1851.74	142.11	1.90	125.72G	7213285.23	2181008.27
6839.00	92.10	149.60	5166.50	1882.53	-1488.50	1154.11	1883.51	142.21	9.62	112.81G	7213258.40	2181025.61
6871.00	91.30	151.50	5165.55	1914.31	-1516.35	1169.84	1915.16	142.35	6.44	153.44G	7213230.90	2181041.94
6903.00	90.70	151.80	5164.99	1946.02	-1544.51	1185.03	1946.74	142.50	2.10	-82.39G	7213203.08	2181057.73
6934.00	90.90	150.30	5164.56	1976.79	-1571.63	1200.03	1977.40	142.64	4.88	-135.00G	7213176.29	2181073.31
6965.00	90.80	150.20	5164.10	2007.60	-1598.54	1215.41	2008.13	142.75	0.46	-165.96G	7213149.72	2181089.27
6997.00	90.00	150.00	5163.88	2039.42	-1626.28	1231.37	2039.87	142.87	2.58	-53.13G	7213122.33	2181105.81
7029.00	90.60	149.20	5163.71	2071.27	-1653.88	1247.56	2071.65	142.97	3.12	-56.28G	7213095.09	2181122.60
7061.00	92.00	147.10	5162.98	2103.18	-1681.05	1264.44	2103.51	143.05	7.89	177.14G	7213068.29	2181140.06
7092.00	90.00	147.20	5162.44	2134.13	-1707.09	1281.25	2134.42	143.11	6.46	-161.57G	7213042.62	2181157.43
7124.00	89.10	146.90	5162.69	2166.09	-1733.94	1298.65	2166.35	143.17	2.96	5.71G	7213016.16	2181175.40
7156.00	93.10	147.30	5162.08	2198.03	-1760.80	1316.03	2198.26	143.23	12.56	-83.60G	7212989.68	2181193.35
7188.00	93.30	145.50	5160.29	2229.95	-1787.41	1333.71	2230.16	143.27	5.65	-161.58G	7212963.46	2181211.60
7219.00	92.40	145.20	5158.75	2260.90	-1812.88	1351.31	2261.10	143.30	3.06	23.17G	7212938.38	2181229.75
7251.00	93.10	145.50	5157.22	2292.86	-1839.18	1369.49	2293.05	143.33	2.38	154.43G	7212912.49	2181248.48
7283.00	90.80	146.60	5156.13	2324.82	-1865.70	1387.35	2324.99	143.37	7.97	-135.00G	7212886.35	2181266.91
7315.00	90.00	145.80	5155.90	2356.79	-1892.29	1405.15	2356.95	143.40	3.54	7.12G	7212860.15	2181285.27
7346.00	90.80	145.90	5155.69	2387.78	-1917.95	1422.55	2387.92	143.44	2.60	3.46G	7212834.88	2181303.22

N/G E/W

	7378.00	94.10	146.10	5154.32	2419.73	-1944.45	1440.42	2419.85	143.47	10.33	180.00G	7212808.78	2181321.66
	7410.00	93.90	146.10	5152.09	2451.63	-1970.94	1458.23	2451.74	143.50	0.62	180.00G	7212782.67	2181340.03
	7441.00	92.10	146.10	5150.47	2482.56	-1996.64	1475.49	2482.67	143.54	5.81	74.29G	7212757.36	2181357.85
	7473.00	92.80	148.60	5149.10	2514.48	-2023.55	1492.74	2514.57	143.58	8.11	-153.45G	7212730.82	2181375.67
	7505.00	92.20	148.30	5147.70	2546.36	-2050.80	1509.47	2546.42	143.65	2.10	-171.87G	7212703.95	2181392.98
	7537.00	90.10	148.00	5147.06	2578.27	-2077.97	1526.35	2578.32	143.70	6.63	-123.69G	7212677.15	2181410.44
	7568.00	89.70	147.40	5147.11	2609.20	-2104.18	1542.91	2609.24	143.75	2.33	-71.56G	7212651.31	2181427.57
	7600.00	89.80	147.10	5147.25	2641.15	-2131.09	1560.23	2641.18	143.79	0.99	90.00G	7212624.78	2181445.45
	7632.00	89.80	147.40	5147.36	2673.10	-2158.00	1577.54	2673.12	143.83	0.94	32.47G	7212598.25	2181463.34
	7663.00	90.90	148.10	5147.18	2704.04	-2184.22	1594.08	2704.05	143.88	4.21	20.20G	7212572.40	2181480.44
	7695.00	92.80	148.80	5146.14	2735.93	-2211.47	1610.81	2735.93	143.93	6.33	90.00G	7212545.51	2181497.76
Last Survey	7727.00	92.80	149.10	5144.58	2767.77	-2238.85	1627.30	2767.77	143.99	0.94	0.00G	7212518.49	2181514.83
To MD	7766.00	92.80	149.10	5142.67	2806.57	-2272.28	1647.30	2806.57	144.06	0.00	0.00G	7212485.51	2181535.54

**Survey Type:** Non-Def Survey

**Survey Error Model:** SLB ISCWSA version 22 \*\*\* 3-D 95.00% Confidence 2.7955 sigma

**Surveying Prog:**

**MD From ( ft )**

-18.50

0.00

4750.50

4939.00

**MD To ( ft )**

0.00

4750.50

4939.00

7727.00

**EOU Freq Survey Tool Type**

Act-Stns SLB\_CNSG+CASING

Act-Stns SLB\_CNSG+CASING

Act-Stns SLB\_CNSG+DPIPE

Act-Stns SLB\_MWD-STD

**Borehole -> Survey**

Original Hole -> GH 9 - OH - Scientific Def. Gyro Survey

Original Hole -> GH 9 - OH - Scientific Def. Gyro Survey

Lateral 2 -> GH 9 Lateral #2 SE Field Survey

Lateral 2 -> GH 9 Lateral #2 SE Field Survey

*\*Italicized stations are NOT used in position calculations.*

**Deviation Summary**

Well Name: GH 9 <i>Lateral 2</i>										Location: 20- 8-S 21-E 26		S/T #	V.S. AZI (°)
TMD: 7,727.0 (ft)										TVD: 5,144.56 (ft)		OH	0.00
Closure Distance: 2,767.9 (ft)										Closure Direction: 143.99 (°)		01	312.00
										Spud Date: 3/23/2010			
										Calculation Method: Minimum Curvature			
S/T #	TMD (ft)	Angle (°)	Azimuth (°)	CTM	TVD (ft)	N-S (ft)	E-W (ft)	Vert. Section (ft)	DLS (°/100ft)	BUR (°/100ft)	Type		
01	0.0	0.00	0.00	YNN	0.00	0.00	0.00	0.00	0.00	0.00			
01	4,855.0	1.35	179.95	NYN	4,853.98	-53.38	25.86	-54.95	0.00	0.00	GYR		
01	4,939.0	15.90	335.60	NYN	4,936.98	-43.82	21.11	-45.02	20.40	17.32	MWD		
01	4,970.0	23.10	335.50	YNN	4,966.18	-34.41	16.83	-35.53	23.23	23.23	MWD		
01	5,002.0	29.50	337.50	YNN	4,994.86	-21.40	11.20	-22.65	20.19	20.00	MWD		
01	5,033.0	34.30	336.20	YNN	5,021.17	-6.35	4.75	-7.78	15.64	15.48	MWD		
01	5,065.0	37.40	331.90	YNN	5,047.11	10.48	-3.46	9.59	12.48	9.69	MWD		
01	5,097.0	41.50	327.50	YNN	5,071.82	28.01	-13.74	28.95	15.50	12.81	MWD		
01	5,128.0	47.10	330.70	YNN	5,094.00	46.59	-24.83	49.62	19.45	18.06	MWD		
01	5,160.0	53.20	331.80	YNN	5,114.49	68.12	-36.63	72.80	19.24	19.06	MWD		
01	5,191.0	55.40	328.10	YNN	5,132.58	89.90	-49.24	96.75	12.01	7.10	MWD		
01	5,223.0	58.30	327.60	YNN	5,150.08	112.58	-63.50	122.52	9.16	9.06	MWD		
01	5,255.0	64.30	327.50	YNN	5,165.44	136.25	-78.55	149.55	18.75	18.75	MWD		
01	5,286.0	70.30	326.80	YNN	5,177.40	160.26	-94.06	177.14	19.47	19.35	MWD		
01	5,318.0	71.00	326.80	YNN	5,188.00	185.53	-110.60	206.33	2.19	2.19	MWD		
01	5,349.0	72.40	328.00	YNN	5,197.74	210.32	-126.45	234.70	5.82	4.52	MWD		
01	5,381.0	77.80	328.90	YNN	5,205.96	236.67	-142.62	264.35	17.09	16.88	MWD		
01	5,413.0	79.40	329.10	YNN	5,212.29	263.55	-158.78	294.35	5.04	5.00	MWD		
01	5,445.0	80.10	329.30	YNN	5,217.98	290.60	-174.90	324.43	2.27	2.19	MWD		
01	5,476.0	87.00	329.80	YNN	5,221.46	317.14	-190.50	353.78	22.32	22.26	MWD		
01	5,508.0	88.80	328.90	YNN	5,222.63	344.65	-206.80	384.30	6.29	5.63	MWD		
01	5,540.0	88.40	328.70	YNN	5,223.42	372.01	-223.38	414.93	1.40	-1.25	MWD		
01	5,571.0	88.40	328.20	YNN	5,224.28	398.42	-239.59	444.65	1.61	0.00	MWD		
01	5,603.0	88.10	328.00	YNN	5,225.26	425.58	-256.49	475.38	1.13	-0.94	MWD		
01	5,634.0	87.30	325.90	YNN	5,226.50	451.54	-273.38	505.30	7.24	-2.58	MWD		
01	5,662.0	87.40	326.30	YNN	5,227.80	474.75	-288.98	532.43	1.47	0.36	MWD		
01	5,693.0	87.80	323.20	YNN	5,229.10	500.04	-306.86	562.63	10.07	1.29	MWD		
01	5,725.0	87.20	322.10	YNN	5,230.49	525.46	-326.25	594.05	3.91	-1.88	MWD		
01	5,757.0	88.90	319.10	YNN	5,231.58	550.17	-346.55	625.67	10.77	5.31	MWD		
01	5,788.0	88.10	317.90	YNN	5,232.39	573.38	-367.08	656.46	4.65	-2.58	MWD		
01	5,820.0	89.50	317.30	YNN	5,233.06	597.00	-388.66	688.30	4.76	4.38	MWD		
01	5,851.0	89.40	315.00	YNN	5,233.36	619.35	-410.13	719.21	7.43	-0.32	MWD		
01	5,883.0	86.50	310.30	YNN	5,234.50	641.01	-433.64	751.18	17.25	-9.06	MWD		

**Deviation Summary**

Well Name: GH 9 TMD: 7,727.0 (ft) Closure Distance: 2,767.9 (ft)										Location: 20- 8-S 21-E 26 Spud Date: 3/23/2010 Calculation Method: Minimum Curvature	
TVD: 5,144.56 (ft) Closure Direction: 143.99 (°)										S/T #	V.S. AZI (°)
S/T #	TMD (ft)	Angle (°)	Azimuth (°)	CTM	TVD (ft)	N/-S (ft)	E/-W (ft)	Vert. Section (ft)	DLS (°/100ft)	BUR (°/100ft)	Type
01	5,915.0	87.60	306.60	YNN	5,236.15	660.88	-458.66	783.07	12.05	3.44	MWD
01	5,946.0	89.90	307.60	YNN	5,236.83	679.57	-483.38	813.95	8.09	7.42	MWD
01	5,978.0	91.50	305.20	YNN	5,236.44	698.56	-509.13	845.79	9.01	5.00	MWD
01	6,010.0	90.90	305.10	YNN	5,235.77	716.98	-535.29	877.55	1.90	-1.88	MWD
01	6,041.0	91.70	305.50	YNN	5,235.06	734.89	-560.59	908.33	2.89	2.58	MWD
01	6,073.0	91.80	304.50	YNN	5,234.09	753.23	-586.79	940.08	3.14	0.31	MWD
01	6,105.0	89.80	302.40	YNN	5,233.64	770.87	-613.48	971.72	9.06	-6.25	MWD
01	6,136.0	86.90	302.00	YNN	5,234.53	787.38	-639.70	1,002.25	9.44	-9.35	MWD
01	6,167.0	83.60	302.00	YNN	5,237.10	803.75	-665.89	1,032.67	10.65	-10.65	MWD
01	6,199.0	82.70	301.80	YNN	5,240.92	820.54	-692.87	1,063.95	2.88	-2.81	MWD
01	6,231.0	87.00	300.60	YNN	5,243.79	837.04	-720.12	1,095.24	13.95	13.44	MWD
01	6,263.0	88.10	301.50	YNN	5,245.16	853.53	-747.51	1,126.63	4.44	3.44	MWD
01	6,294.0	89.20	301.10	YNN	5,245.89	869.63	-773.99	1,157.08	3.78	3.55	MWD
01	6,326.0	89.40	301.90	YNN	5,246.28	886.35	-801.27	1,188.55	2.58	0.63	MWD
01	6,358.0	88.90	301.30	YNN	5,246.75	903.12	-828.53	1,220.02	2.44	-1.56	MWD
01	6,389.0	88.10	300.80	YNN	5,247.56	919.10	-855.07	1,250.44	3.04	-2.58	MWD
01	6,421.0	86.70	299.40	YNN	5,249.01	935.13	-882.73	1,281.72	6.18	-4.38	MWD
01	6,455.0	87.00	297.80	YNN	5,250.88	951.38	-912.53	1,314.74	4.78	0.88	MWD
01	6,484.0	87.00	297.50	YNN	5,252.40	964.82	-938.19	1,342.80	1.03	0.00	MWD
01	6,516.0	90.80	297.90	YNN	5,253.02	979.69	-966.51	1,373.80	11.94	11.88	MWD
01	6,580.0	90.00	297.10	NYN	5,252.34	1,009.24	-1,023.28	1,435.76	1.77	-1.25	MWD
01	6,612.0	89.90	296.80	YNN	5,252.37	1,023.74	-1,051.80	1,466.66	0.99	-0.31	MWD
01	6,643.0	90.00	297.00	YNN	5,252.39	1,037.77	-1,079.45	1,496.59	0.72	0.32	MWD
01	6,670.0	88.80	298.30	YNN	5,252.68	1,050.30	-1,103.36	1,522.74	6.55	-4.44	MWD
01	6,702.0	88.60	297.70	YNN	5,253.40	1,065.32	-1,131.61	1,553.78	1.98	-0.63	MWD
01	6,733.0	87.90	296.80	YNN	5,254.35	1,079.50	-1,159.15	1,583.75	3.68	-2.26	MWD
01	6,771.0	86.60	296.30	YNN	5,256.17	1,096.47	-1,193.11	1,620.33	3.66	-3.42	MWD
01	6,797.0	87.90	296.90	YNN	5,257.42	1,108.10	-1,216.33	1,645.37	5.51	5.00	MWD
01	6,828.0	90.30	299.10	YNN	5,257.91	1,122.65	-1,243.69	1,675.44	10.50	7.74	MWD
01	6,860.0	90.10	299.40	YNN	5,257.80	1,138.28	-1,271.61	1,706.65	1.13	-0.63	MWD
01	6,892.0	88.20	299.60	YNN	5,258.27	1,154.04	-1,299.46	1,737.89	5.97	-5.94	MWD
01	6,924.0	89.00	299.50	YNN	5,259.05	1,169.82	-1,327.29	1,769.13	2.52	2.50	MWD
01	6,955.0	89.30	299.60	YNN	5,259.51	1,185.10	-1,354.25	1,799.39	1.02	0.97	MWD

**Deviation Summary**

Well Name: GH 9 TMD: 7,727.0 (ft) Closure Distance: 2,767.9 (ft)										Location: 20-8-S 21-E 26 Spud Date: 3/23/2010 Calculation Method: Minimum Curvature	
TVD: 5,144.56 (ft) Closure Direction: 143.99 (°)										S/T #	V.S. AZI (°)
S/T #	TMD (ft)	Angle (°)	Azimuth (°)	CTM	TVD (ft)	N-S (ft)	E-W (ft)	Vert. Section (ft)	DLS (°/100ft)	OH 01	0.00 312.00
										BUR (°/100ft)	Type
01	6,987.0	89.00	301.40	YNN	5,259.99	1,201.34	-1,381.82	1,830.75	5.70	-0.94	MWD
01	7,023.0	87.20	301.40	YNN	5,261.18	1,220.09	-1,412.53	1,866.11	5.00	-5.00	MWD
01	7,054.0	86.60	300.70	YNN	5,262.86	1,236.05	-1,439.05	1,896.50	2.97	-1.94	MWD
01	7,086.0	85.60	301.40	YNN	5,265.03	1,252.52	-1,466.40	1,927.85	3.81	-3.13	MWD
01	7,118.0	86.60	300.60	YNN	5,267.21	1,268.96	-1,493.76	1,959.18	4.00	3.13	MWD
01	7,150.0	90.80	300.80	YNN	5,267.94	1,285.29	-1,521.27	1,990.55	13.14	13.13	MWD
01	7,181.0	93.40	300.60	YNN	5,266.80	1,301.11	-1,547.90	2,020.92	8.41	8.39	MWD
01	7,213.0	92.50	302.70	YNN	5,265.15	1,317.87	-1,575.10	2,052.36	7.13	-2.81	MWD
01	7,245.0	91.30	302.90	YNN	5,264.09	1,335.20	-1,601.99	2,083.93	3.80	-3.75	MWD
01	7,276.0	89.30	304.40	YNN	5,263.93	1,352.38	-1,627.79	2,114.60	8.06	-6.45	MWD
01	7,308.0	89.00	305.90	YNN	5,264.40	1,370.80	-1,653.95	2,146.37	4.78	-0.94	MWD
01	7,340.0	86.90	307.10	YNN	5,265.55	1,389.82	-1,679.66	2,178.20	7.56	-6.56	MWD
01	7,372.0	84.40	306.90	YNN	5,267.98	1,409.02	-1,705.14	2,209.98	7.84	-7.81	MWD
01	7,403.0	83.90	307.10	YNN	5,271.14	1,427.58	-1,729.77	2,240.70	1.74	-1.61	MWD
02	7,150.0	90.30	300.70	NYN	5,267.97	1,285.48	-1,521.20	1,990.59	0.00	0.00	MWD
02	7,176.0	89.50	301.30	YNN	5,268.02	1,298.87	-1,543.49	2,016.15	3.85	-3.08	MWD
02	7,208.0	91.20	306.40	YNN	5,267.82	1,316.69	-1,570.05	2,047.81	16.80	5.31	MWD
02	7,239.0	88.50	309.00	YNN	5,267.90	1,335.64	-1,594.58	2,078.72	12.09	-8.71	MWD
02	7,271.0	88.60	308.70	YNN	5,268.71	1,355.71	-1,619.49	2,110.66	0.99	0.31	MWD
02	7,303.0	88.90	309.10	YNN	5,269.41	1,375.80	-1,644.39	2,142.61	1.56	0.94	MWD
02	7,335.0	88.90	309.90	YNN	5,270.02	1,396.15	-1,669.07	2,174.57	2.50	0.00	MWD
02	7,366.0	89.10	309.50	YNN	5,270.56	1,415.95	-1,692.92	2,205.54	1.44	0.65	MWD
02	7,398.0	89.10	309.40	YNN	5,271.07	1,436.28	-1,717.63	2,237.50	0.31	0.00	MWD
02	7,430.0	89.70	309.20	YNN	5,271.40	1,456.55	-1,742.39	2,269.47	1.98	1.88	MWD
02	7,461.0	89.90	309.10	YNN	5,271.51	1,476.12	-1,766.43	2,300.43	0.72	0.65	MWD
02	7,493.0	89.10	308.50	YNN	5,271.79	1,496.17	-1,791.37	2,332.38	3.12	-2.50	MWD
02	7,524.0	88.50	308.00	YNN	5,272.44	1,515.36	-1,815.71	2,363.30	2.52	-1.94	MWD
02	7,556.0	88.50	308.10	YNN	5,273.28	1,535.07	-1,840.90	2,395.22	0.31	0.00	MWD
02	7,588.0	88.70	308.00	YNN	5,274.06	1,554.79	-1,866.09	2,427.13	0.70	0.63	MWD
02	7,620.0	89.00	307.80	YNN	5,274.70	1,574.44	-1,891.33	2,459.04	1.13	0.94	MWD
02	7,651.0	89.10	309.10	YNN	5,275.21	1,593.72	-1,915.61	2,489.98	4.21	0.32	MWD
02	7,683.0	89.50	307.20	YNN	5,275.61	1,613.48	-1,940.77	2,521.90	6.07	1.25	MWD
02	7,715.0	89.40	307.50	YNN	5,275.91	1,632.89	-1,966.21	2,553.80	0.99	-0.31	MWD

**QEP ENERGY**

**Deviation Summary**

Well Name: GH 9 TMD: 7,727.0 (ft) Closure Distance: 2,767.9 (ft)										Location: 20- 8-S 21-E 26 Spud Date: 3/23/2010 Calculation Method: Minimum Curvature	
TVD: 5,144.56 (ft) Closure Direction: 143.99 (°)										S/T #	V.S. AZI (°)
S/T #	TMD (ft)	Angle (°)	Azimuth (°)	CTM	TVD (ft)	N-S (ft)	E-W (ft)	Vert. Section (ft)	DLS (°/100ft)	OH 01	0.00 312.00
										BUR (°/100ft)	Type
02	7,747.0	88.50	307.00	YNN	5,276.50	1,652.26	-1,991.67	2,585.68	3.22	-2.81	MWD
02	7,778.0	88.50	306.50	YNN	5,277.31	1,670.80	-2,016.50	2,616.54	1.61	0.00	MWD
02	7,810.0	89.00	306.30	YNN	5,278.01	1,689.79	-2,042.25	2,648.38	1.68	1.56	MWD
02	7,842.0	89.20	306.20	YNN	5,278.51	1,708.71	-2,068.06	2,680.21	0.70	0.63	MWD
02	7,873.0	89.20	306.20	YNN	5,278.94	1,727.01	-2,093.07	2,711.05	0.00	0.00	MWD
02	7,905.0	87.50	305.50	YNN	5,279.87	1,745.75	-2,119.00	2,742.85	5.74	-5.31	MWD
02	7,937.0	87.40	305.40	YNN	5,281.29	1,764.29	-2,145.04	2,774.61	0.44	-0.31	MWD
02	7,968.0	88.40	306.50	YNN	5,282.42	1,782.47	-2,170.12	2,805.42	4.79	3.23	MWD
02	8,031.0	90.20	306.90	YNN	5,283.19	1,820.12	-2,220.62	2,868.14	2.93	2.86	MWD
02	8,094.0	90.20	306.30	YNN	5,282.97	1,857.68	-2,271.20	2,930.86	0.95	0.00	MWD
02	8,126.0	87.80	306.80	YNN	5,283.53	1,876.73	-2,296.90	2,962.71	7.66	-7.50	MWD
02	8,158.0	87.40	306.50	YNN	5,284.87	1,895.82	-2,322.55	2,994.54	1.56	-1.25	MWD
02	8,189.0	86.50	305.50	YNN	5,286.52	1,914.01	-2,347.59	3,025.33	4.34	-2.90	MWD
02	8,221.0	87.40	305.60	YNN	5,288.23	1,932.59	-2,373.59	3,057.08	2.83	2.81	MWD
03	4,750.0	1.54	177.91	NYN	4,749.01	-50.91	25.82	56.61	0.00	0.00	
03	4,875.0	21.90	110.80	YNN	4,870.89	-60.98	47.93	77.45	17.08	16.29	MWD
03	4,907.0	28.90	112.50	YNN	4,899.78	-66.07	60.67	88.92	21.99	21.88	MWD
03	4,939.0	30.30	116.10	YNN	4,927.60	-72.58	75.06	102.51	7.07	4.38	MWD
03	4,970.0	29.40	118.50	YNN	4,954.49	-79.65	88.77	116.17	4.82	-2.90	MWD
03	5,002.0	32.30	118.20	YNN	4,981.96	-87.44	103.21	130.83	9.08	9.06	MWD
03	5,034.0	36.40	116.20	YNN	5,008.38	-95.68	119.28	146.79	13.29	12.81	MWD
03	5,065.0	40.60	115.70	YNN	5,032.63	-104.12	136.63	163.65	13.59	13.55	MWD
03	5,097.0	44.90	120.20	YNN	5,056.13	-114.32	155.78	183.00	16.48	13.44	MWD
03	5,129.0	50.30	127.40	YNN	5,077.72	-127.50	175.35	205.02	23.66	16.88	MWD
03	5,160.0	54.70	131.30	YNN	5,096.59	-143.10	194.34	228.69	17.35	14.19	MWD
03	5,192.0	58.10	133.80	YNN	5,114.30	-161.13	213.97	254.71	12.46	10.63	MWD
03	5,223.0	61.30	135.60	YNN	5,129.93	-179.96	232.98	281.04	11.47	10.32	MWD
03	5,255.0	64.70	138.60	YNN	5,144.46	-200.84	252.38	309.28	13.51	10.63	MWD
03	5,287.0	66.70	141.50	YNN	5,157.63	-223.20	271.10	338.33	10.36	6.25	MWD
03	5,318.0	67.70	143.30	YNN	5,169.65	-245.84	288.53	366.88	6.25	3.23	MWD
03	5,350.0	71.90	143.60	YNN	5,180.69	-269.96	306.41	396.89	13.15	13.13	MWD
03	5,381.0	78.40	145.10	YNN	5,188.63	-294.30	323.86	426.84	21.48	20.97	MWD
03	5,413.0	83.70	144.80	YNN	5,193.61	-320.17	342.01	458.44	16.59	16.56	MWD

**QEP ENERGY**

**Deviation Summary**

Well Name: GH 9	Location: 20- 8-S 21-E 26	S/T #	V.S. AZI (°)
TMD: 7,727.0 (ft)	TVD: 5,144.56 (ft)	OH	0.00
Closure Distance: 2,767.9 (ft)	Closure Direction: 143.99 (°)	01	312.00
		Calculation Method: Minimum Curvature	

S/T #	TMD (ft)	Angle (°)	Azimuth (°)	CTM	TVD (ft)	N-S (ft)	E-W (ft)	Vert. Section (ft)	DLS (°/100ft)	BUR (°/100ft)	Type
03	5,445.0	85.40	144.30	YNN	5,196.65	-346.12	360.48	490.29	5.54	5.31	MWD
03	5,476.0	87.50	143.70	YNN	5,198.57	-371.15	378.67	521.22	7.04	6.77	MWD
03	5,508.0	91.40	143.40	YNN	5,198.88	-396.88	397.68	553.20	12.22	12.19	MWD
03	5,540.0	91.50	143.10	YNN	5,198.07	-422.51	416.82	585.18	0.99	0.31	MWD
03	5,571.0	91.20	142.70	YNN	5,197.34	-447.23	435.51	616.15	1.61	-0.97	MWD
03	5,603.0	91.40	142.40	YNN	5,196.61	-472.63	454.96	648.11	1.13	0.63	MWD
03	5,635.0	91.10	142.80	YNN	5,195.91	-498.05	474.39	680.08	1.56	-0.94	MWD
03	5,666.0	91.40	142.00	YNN	5,195.24	-522.60	493.30	711.04	2.76	0.97	MWD
03	5,698.0	90.90	141.10	YNN	5,194.59	-547.66	513.20	742.97	3.22	-1.56	MWD
03	5,730.0	90.10	141.20	YNN	5,194.32	-572.58	533.27	774.90	2.52	-2.50	MWD
03	5,761.0	88.40	140.60	YNN	5,194.72	-596.63	552.82	805.81	5.82	-5.48	MWD
03	5,793.0	88.10	140.80	YNN	5,195.70	-621.38	573.08	837.71	1.13	-0.94	MWD
03	5,800.0	88.30	139.90	YNN	5,195.92	-626.77	577.54	844.68	13.16	2.86	MWD
03	5,832.0	89.30	140.70	YNN	5,196.59	-651.38	597.98	876.57	4.00	3.13	MWD
03	5,863.0	91.60	141.60	YNN	5,196.34	-675.52	617.42	907.49	7.97	7.42	MWD
03	5,895.0	94.20	141.60	YNN	5,194.73	-700.57	637.27	939.39	8.13	8.13	MWD
03	5,927.0	95.10	141.90	YNN	5,192.13	-725.61	657.02	971.24	2.96	2.81	MWD
03	5,959.0	95.10	144.00	YNN	5,189.29	-751.05	676.22	1,003.09	6.54	0.00	MWD
03	5,990.0	94.80	144.30	YNN	5,186.61	-776.08	694.31	1,033.97	1.37	-0.97	MWD
03	6,022.0	92.80	145.10	YNN	5,184.49	-802.14	712.76	1,065.90	6.73	-6.25	MWD
03	6,054.0	92.40	145.40	YNN	5,183.04	-828.41	730.98	1,097.86	1.56	-1.25	MWD
03	6,085.0	91.40	144.60	YNN	5,182.01	-853.79	748.75	1,128.85	4.13	-3.23	MWD
03	6,117.0	90.70	146.80	YNN	5,181.43	-880.22	766.78	1,160.84	7.21	-2.19	MWD
03	6,149.0	91.10	146.90	YNN	5,180.92	-907.00	784.27	1,192.82	1.29	1.25	MWD
03	6,180.0	91.60	146.50	YNN	5,180.19	-932.91	801.29	1,223.79	2.07	1.61	MWD
03	6,212.0	92.00	147.90	YNN	5,179.19	-959.79	818.61	1,255.75	4.55	1.25	MWD
03	6,244.0	93.10	147.90	YNN	5,177.76	-986.87	835.60	1,287.68	3.44	3.44	MWD
03	6,275.0	93.80	148.30	YNN	5,175.90	-1,013.14	851.95	1,318.58	2.60	2.26	MWD
03	6,307.0	92.30	148.90	YNN	5,174.20	-1,040.42	868.60	1,350.47	5.05	-4.69	MWD
03	6,339.0	92.30	148.50	YNN	5,172.91	-1,067.74	885.21	1,382.38	1.25	0.00	MWD
03	6,371.0	90.90	148.90	YNN	5,172.02	-1,095.07	901.83	1,414.30	4.55	-4.38	MWD
03	6,403.0	88.80	148.60	YNN	5,172.10	-1,122.42	918.43	1,446.23	6.63	-6.56	MWD
03	6,434.0	87.20	149.30	YNN	5,173.18	-1,148.96	934.41	1,477.13	5.63	-5.16	MWD

**QEP ENERGY**

**Deviation Summary**

Well Name: GH 9 TMD: 7,727.0 (ft) Closure Distance: 2,767.9 (ft)										Location: 20- 8-S 21-E 26 Spud Date: 3/23/2010 Calculation Method: Minimum Curvature	
TVD: 5,144.56 (ft) Closure Direction: 143.99 (°)										S/T #	V.S. AZI (°)
										OH 01	0.00 312.00
S/T #	TMD (ft)	Angle (°)	Azimuth (°)	CTM	TVD (ft)	N-S (ft)	E-W (ft)	Vert. Section (ft)	DLS (°/100ft)	BUR (°/100ft)	Type
03	6,466.0	87.40	148.90	YNN	5,174.69	-1,176.39	950.82	1,509.01	1.40	0.63	MWD
03	6,497.0	86.00	148.10	YNN	5,176.48	-1,202.78	966.99	1,539.90	5.20	-4.52	MWD
03	6,529.0	88.10	147.30	YNN	5,178.12	-1,229.79	984.07	1,571.82	7.02	6.56	MWD
03	6,561.0	90.30	147.10	YNN	5,178.57	-1,256.68	1,001.40	1,603.80	6.90	6.88	MWD
03	6,593.0	91.10	146.50	YNN	5,178.18	-1,283.46	1,018.92	1,635.78	3.12	2.50	MWD
03	6,618.0	91.70	146.40	YNN	5,177.57	-1,304.29	1,032.73	1,660.76	2.43	2.40	MWD
03	6,650.0	92.20	146.30	YNN	5,176.48	-1,330.91	1,050.46	1,692.73	1.59	1.56	MWD
03	6,680.0	92.30	146.20	YNN	5,175.30	-1,355.83	1,067.11	1,722.70	0.47	0.33	MWD
03	6,712.0	92.90	146.20	YNN	5,173.85	-1,382.40	1,084.89	1,754.66	1.88	1.88	MWD
03	6,744.0	93.10	145.90	YNN	5,172.17	-1,408.91	1,102.74	1,786.61	1.13	0.63	MWD
03	6,775.0	93.80	146.50	YNN	5,170.31	-1,434.62	1,119.95	1,817.55	2.97	2.26	MWD
03	6,807.0	93.90	147.10	YNN	5,168.16	-1,461.34	1,137.44	1,849.46	1.90	0.31	MWD
03	6,839.0	92.10	149.60	YNN	5,166.48	-1,488.54	1,154.20	1,881.36	9.62	-5.63	MWD
03	6,871.0	91.30	151.50	YNN	5,165.54	-1,516.39	1,169.93	1,913.19	6.44	-2.50	MWD
03	6,903.0	90.70	151.80	YNN	5,164.98	-1,544.55	1,185.12	1,944.97	2.10	-1.88	MWD
03	6,934.0	90.90	150.30	YNN	5,164.54	-1,571.67	1,200.12	1,975.80	4.88	0.65	MWD
03	6,965.0	90.80	150.20	YNN	5,164.08	-1,598.58	1,215.50	2,006.66	0.46	-0.32	MWD
03	6,997.0	90.00	150.00	YNN	5,163.86	-1,626.32	1,231.46	2,038.54	2.58	-2.50	MWD
03	7,029.0	90.60	149.20	YNN	5,163.69	-1,653.92	1,247.65	2,070.43	3.12	1.88	MWD
03	7,061.0	92.00	147.10	YNN	5,162.97	-1,681.09	1,264.53	2,102.37	7.89	4.38	MWD
03	7,092.0	90.00	147.20	YNN	5,162.43	-1,707.13	1,281.34	2,133.35	6.46	-6.45	MWD
03	7,124.0	89.10	146.90	YNN	5,162.68	-1,733.98	1,298.75	2,165.32	2.96	-2.81	MWD
03	7,156.0	93.10	147.30	YNN	5,162.06	-1,760.84	1,316.12	2,197.29	12.56	12.50	MWD
03	7,188.0	93.30	145.50	YNN	5,160.28	-1,787.45	1,333.80	2,229.23	5.65	0.63	MWD
03	7,219.0	92.40	145.20	YNN	5,158.74	-1,812.92	1,351.40	2,260.19	3.06	-2.90	MWD
03	7,251.0	93.10	145.50	YNN	5,157.20	-1,839.21	1,369.58	2,292.15	2.38	2.19	MWD
03	7,283.0	90.80	146.60	YNN	5,156.11	-1,865.74	1,387.44	2,324.13	7.97	-7.19	MWD
03	7,315.0	90.00	145.80	YNN	5,155.89	-1,892.33	1,405.24	2,356.12	3.54	-2.50	MWD
03	7,346.0	90.80	145.90	YNN	5,155.67	-1,917.98	1,422.64	2,387.11	2.60	2.58	MWD
03	7,378.0	94.10	146.10	YNN	5,154.30	-1,944.49	1,440.51	2,419.07	10.33	10.31	MWD
03	7,410.0	93.90	146.10	YNN	5,152.07	-1,970.98	1,458.32	2,450.99	0.63	-0.63	MWD
03	7,441.0	92.10	146.10	YNN	5,150.45	-1,996.68	1,475.58	2,481.94	5.81	-5.81	MWD
03	7,473.0	92.80	148.60	YNN	5,149.08	-2,023.59	1,492.83	2,513.88	8.11	2.19	MWD

QEP ENERGY

Deviation Summary

Well Name: GH 9 TMD: 7,727.0 (ft) Closure Distance: 2,767.9 (ft)										Location: 20-8-S 21-E 26 Spud Date: 3/23/2010 Calculation Method: Minimum Curvature	
TVD: 5,144.56 (ft) Closure Direction: 143.99 (°)										S/T #	V.S. AZI (°)
S/T #	TMD (ft)	Angle (°)	Azimuth (°)	CTM	TVD (ft)	N-S (ft)	E-W (ft)	Vert. Section (ft)	DLS (°/100ft)	BUR (°/100ft)	Type
03	7,505.0	92.20	148.30	YNN	5,147.69	-2,050.84	1,509.56	2,545.79	2.10	-1.88	MWD
03	7,537.0	90.10	148.00	YNN	5,147.04	-2,078.01	1,526.44	2,577.74	6.63	-6.56	MWD
03	7,568.0	89.70	147.40	YNN	5,147.10	-2,104.21	1,543.01	2,608.70	2.33	-1.29	MWD
03	7,600.0	89.80	147.10	YNN	5,147.24	-2,131.13	1,560.32	2,640.68	0.99	0.31	MWD
03	7,632.0	89.80	147.40	YNN	5,147.35	-2,158.04	1,577.63	2,672.65	0.94	0.00	MWD
03	7,663.0	90.90	148.10	YNN	5,147.16	-2,184.26	1,594.17	2,703.62	4.21	3.55	MWD
03	7,695.0	92.80	148.80	YNN	5,146.13	-2,211.51	1,610.90	2,735.54	6.33	5.94	MWD
03	7,727.0	92.80	149.10	YNN	5,144.56	-2,238.89	1,627.39	2,767.42	0.94	0.00	MWD

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# Operations Summary Report - PREP FOR DRILL WORK

Well Name: GH 9  
 Location: ~~20-8-S-21-E-28~~  
 Rig Name: 8S 21E 20  
 Spud Date: 3/23/2010  
 Rig Release:  
 Rig Number:

Date	From - To	Hours	Code	Sub Code	Description of Operations
3/4/2010	07:00 - 19:00	12.00	BOP	1	<p>TIGHT HOLE - PREP FOR DRILL</p> <p>On 3/3/10 @ 7:00 AM - MIRU, hot oiler had 200 bbls chemical water down csg, well circulated after 20 bbls. Unhang rods, lay down H-head, test tbg to 800 psi, good test, good pump action. Unseat pump, flush tbg w/ 70 bbls chemical water. POOH w/ rods &amp; pump, laying down rods on trailer. Flush tbg w/ 60 bbls chemical water, X-over to tbg equipment, ND WH, unland tbg, try to release TAC, unable to get it to release. RU rig floor &amp; tongs, work tbg. TAC came free. ND rig floor, NU BOP's, RU rig floor. Secure well. SDFN @ 7:00 PM.</p> <p>24 Hour Forecast: Run bit &amp; scraper. POOH &amp; lay down tbg.</p> <p>Csg Size: 5-1/2" 17# K-55 Csg Depth: 5378'</p>
3/5/2010	07:00 - 19:00	12.00	BOP	1	<p>TIGHT HOLE - PREP FOR DRILL</p> <p>On 3/4/10 @ 7:00 AM - 0 psi on well. POOH w/ 2-7/8" tbg, TAC hanging up on csg collars. RIH w/ 5-1/2" csg scraper to 4871', POOH w/ tbg. RU wireline, RIH w/ 5-1/2" RBP, set plug @ 4870'. RD wireline, RIH w/ 2-7/8" tbg, tag plug @ 4870'. Lay down one jt tbg. Fill hole w/ 88 bbls chemical water, circ hole clean w/ 150 bbls chemical water. POOH &amp; lay down 106 jts tbg. Secure well. SDFN @ 7:00 PM.</p> <p>24 Hour Forecast: Finish POOH &amp; lay down tbg.</p> <p>Csg Size: 5-1/2" 17# K-55 Csg Depth: 5378'</p>
3/6/2010	07:00 - 19:00	12.00	BOP	1	<p>TIGHT HOLE - PREP FOR DRILL</p> <p>On 3/5/10 @ 7:00AM - 0 psi on well, continue POOH &amp; laying down 2-7/8" tbg. RD Rig floor, ND BOP's. Install B-1 flange, NU WH. RDMO. Leave well Shut in. Road rig to Brennan #8. SDFN.</p> <p>FINAL REPORT.</p> <p>Csg Size: 5-1/2" 17# K-55 Csg Depth: 5378'</p>

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## Operations Summary Report

Well Name: GH 9  
 Location: 20- 8-S 21-E 26  
 Rig Name: AZTEC

Spud Date: 3/23/2010  
 Rig Release: 4/16/2010  
 Rig Number: 777

Date	From - To	Hours	Code	Sub Code	Description of Operations
3/23/2010	06:00 - 06:00	24.00	LOC	3	RIG DOWN AND MOVE RIG FROM THE OP 16G TO THE GH #9.(19 MILES) RIG 100% RIGGED DOWN, 90% MOVED (STILL NEED SOME PIPE FROM WEATHERFORD) AND 75% RIGGED UP, DERRICK UP, BACK YARD AND TRAILERS SET AND RIGGRD UP, WATER SYSTEM CIRCULATING, MUD TANKS FILLED AND CIRCULATING MUD SYSTEM
3/24/2010	06:00 - 10:00	4.00	LOC	4	RIG UP: FINISH RIGGING UP FLOOR AND WINDWALLS, WORK ON DERRICK (WELDING WORK FOR TOP DRIVE TRACK)
	10:00 - 13:00	3.00	OTH		INSTALL 4" LINERS IN PUMP, RIG ON DAYRATE AT 10:00 AM ON 3/23/2110
	13:00 - 20:00	7.00	BOP	1	NIPPLE UP BOP, INSTALL 2 7/8 PIPE RAMS
	20:00 - 23:30	3.50	BOP	2	TEST BOP, DART AND TIW VALVES, TOP DRIVE DOUBLE BALL VALVE, PIPE RAMS, KILL VALVE, CHECK VALVE, CHOKE VALVE AND CHOKE MANIFOLD - 3000 PSI HIGH, 250 PSI LOW, ANNULAR - 1500 HIGH, 250 PSI LOW, CASING 300 PSI
	23:30 - 01:30	2.00	OTH		FINISH FABRICATION ON FLOW LINE AND INSTALL
	01:30 - 02:30	1.00	RIG	6	CUT DRILLING LINE, CHANGE OUT LOAD CELL ON DEADMAN
	02:30 - 03:30	1.00	TRP	1	LINE UP AND STRAP BHA
	03:30 - 04:00	0.50	OTH		HELD SAFETY MEETING AND RIG UP LAY DOWN TRUCK TO PICK UP 2 7/8 DRILL STRING
	04:00 - 05:00	1.00	OTH		INSTLALL WEAR BUSHING
	05:00 - 06:00	1.00	TRP	1	PICK UP BHA
3/25/2010	06:00 - 10:00	4.00	TRP	1	PICK UP 2 7/8" DRILL PIPE
	10:00 - 10:30	0.50	OTH		RIG DOWN LAY DOWN TRUCK
	10:30 - 11:00	0.50	OTH		SET TORQUE ON TOP DRIVE
	11:00 - 13:00	2.00	CIRC	1	TAG BRIGE PLUG @ 4873'. CIRCULATE HOLE WITH 100 BBLS OF 225 DWG WATER
	13:00 - 15:30	2.50	TRP	2	TRIP OUT OF HOLE FOR WHIPSTOCK
	15:30 - 16:30	1.00	RIG	1	SERVICE TOP DRIVE AND RIG
	16:30 - 17:30	1.00	WOT	4	WAIT ON UBHO SUB FROM SIENTIFIC
	17:30 - 18:00	0.50	TRP	1	PICK UP AND MAKE UP WHIP STOCK ASSEMBLY
	18:00 - 21:00	3.00	TRP	2	TRIP IN THE HOLE WITH THE WHIP STOCK ASSEMBLY
	21:00 - 23:30	2.50	DRL	3	ORINATE AND SET WHIP STOCK @ 317 DEGREES
	23:30 - 06:00	6.50	FISH	1	MILL THE WINDOW FROM 4858 FEET TO 4862
3/26/2010	06:00 - 09:00	3.00	FISH	1	MILL WINDOW F/4862 T/4869
	09:00 - 10:00	1.00	CIRC	1	CIRCULATE HIGH VIS SWEEP
	10:00 - 12:00	2.00	TRP	2	TRIP OUT OF HOLE FOR DIRECTIONAL TOOLS-LAY DOWN MILLS
	12:00 - 16:00	4.00	TRP	1	PICK UP DIRECTIONAL TOOLS, ORIENT AND TEST
	16:00 - 18:00	2.00	TRP	2	TRIP IN THE HOLE WITH DIRECTIONAL TOOLS
	18:00 - 20:00	2.00	LOG	2	RIG UP WIRE LINE TRUCK (CASED HOLE SOLUTIONS) AND TRIP IN THE HOLE
	20:00 - 20:30	0.50	DRL	2	DIRECTIONAL DRILL FROM 4864 FT TO 4866 FEET
	20:30 - 21:30	1.00	LOG	2	TRIP OUT WITH WIRE LINE AND REPAIRE LEAK ON X.O. SUB TO PACK OFF HEAD
	21:30 - 22:30	1.00	LOG	2	RUN IN THE HOLE WITH GYRO TOOLS, ORINATE TOOL FACE
	22:30 - 06:00	7.50	DRL	2	DIRECTIONAL DRILL FOR BUILD SECTION FROM 4866 FEET TO 4913
3/27/2010	06:00 - 09:00	3.00	DRL	2	DIRECTIONAL DRILL WITH GYRO F/4913 T/4978
	09:00 - 10:00	1.00	OTH		P.O.O.H WITH GYRO AND RIF DOWN WIRELINE
	10:00 - 06:00	20.00	DRL	2	DIRECTIONAL DRILL F/4978 T/ 5380
3/28/2010	06:00 - 14:00	8.00	DRL	2	DIRECTIONAL DRILL F/5380 T/5672 292' 36.5/HR WOB 12/14 RPM 155/195 GPM 155
	14:00 - 15:00	1.00	CIRC	1	CIRCULATE HIGH VIS SWEEP
	15:00 - 18:00	3.00	TRP	10	TRIP OUT OF HOLE

## Operations Summary Report

Well Name: GH 9  
 Location: 20- 8-S 21-E 26  
 Rig Name: AZTEC

Spud Date: 3/23/2010  
 Rig Release: 4/16/2010  
 Rig Number: 777

Date	From - To	Hours	Code	Sub Code	Description of Operations	
3/28/2010	18:00 - 20:30	2.50	TRP	1	LAY DOWN MOTOR, BIT PICK UP NEW MOTOR AND BIT SCRIB THE MOTOR AND TEST THE MOTOR	
	20:30 - 23:30	3.00	TRP	2	TRIP IN THE HOLE TO THE WINDOW@ 4845	
	23:30 - 00:00	0.50	RIG	1	RIG SERVICE	
	00:00 - 01:00	1.00	TRP	2	FILL THE PIPE AND TRIP IN THE HOLE TO 5640 FT.	
	01:00 - 01:30	0.50	REAM	1	WASH AND REAM FROM 5640 TO 5672 FEET	
	01:30 - 04:00	2.50			TROUBLE SHOOT THE M.W.D. TOOLS	
3/29/2010	04:00 - 06:00	2.00	DRL	2	DIRECTIONAL DRILL FROM 5672 TO 5750	
	06:00 - 09:30	3.50	DRL	2	DIRECTIONAL DRILL F/5750 T/5954 204' 58.2/HR WOB 12/14 RPM 220 GPM 147	
	09:30 - 10:30	1.00	SUR	1	SURVEYS AND CONNECTIONS	
	10:30 - 11:30	1.00	DRL	2	DIRECTIONAL DRILL F/5954 T/6017 63' 63/HR SAME PARAMETERS	
	11:30 - 12:30	1.00	RIG	1	RIG SERVICE AND CHANGE OUT WASH PIPE	
	12:30 - 16:30	4.00	DRL	1	DIRECTIONAL DRILL F/6017 T/6156 139' 34.8/HR SAME PARAMETERS	
	16:30 - 18:30	2.00	CIRC	1	CIRCULATE, TROUBLE MWD-TOOL FAILURE. BRING MUD WT TO 9.0 PGM	
	18:30 - 23:00	4.50	TRP	13	TRIP OUT FOR M.W.D. FAILURE PUMP TRIP SLUG @ THE WINDOW	
	23:00 - 01:00	2.00	TRP	1	LAY DOWN BIT MOTOR PICK UP A NEW BIT AND NEW MOTOR ORINATE TOOLS	
	01:00 - 03:00	2.00	TRP	2	TRIP IN THE HOLE SURFACE TEST MOTOR ( O.K.) TO THE WINDOW FILL THE PIPE	
	3/30/2010	03:00 - 03:30	0.50	CIRC	1	CIRC. GAS FROM THE WELL AT 4240 FEET WITH 15 TO 20 FT' FLARE
		03:30 - 04:30	1.00	TRP	2	TRIP IN THE HOLE
04:30 - 05:00		0.50	REAM	1	WASH 45' TO BOTTOM	
05:00 - 06:00		1.00	DRL	2	DIRECTIONAL DRILL F/6156 T/6176	
06:00 - 00:00		18.00	DRL	2	DIRECTIONAL DRILL F/6175 T/ 6742 567' 31.5/HR WOB 12/14 ROM 210 GPM 140	
00:00 - 01:00		1.00	SUR	1	SURVEY AND CONNECTIONS	
01:00 - 02:00		1.00	OTH		TROUBLE SHOOT M.W.D. TOOLS	
02:00 - 06:00		4.00	TRP	13	M.W.D. TOOLS FAILED TROP OUT OF HOLE	
3/31/2010		06:00 - 09:30	3.50	TRP	1	CHANGE OUT DIRECTIONAL TOOLS, ORIENT AND TEST
		09:30 - 11:30	2.00	TRP	13	TRIP IN HOLE TO THE WINDOW @ 4864 FT'
	11:30 - 12:00	0.50	CIRC	1	CIRC OUT GAS	
	12:00 - 13:00	1.00	TRP	2	TRIP IN THE HOLE	
	13:00 - 14:00	1.00	REAM	1	WASH 35' TO BOTTOM,RE LOG HOLE	
	14:00 - 05:00	15.00	DRL	2	DRICTIONAL DRILL FROM 6742 TO 7055 313' 20.8/HR WOB 14/15 RPM 205 GPM 140	
	05:00 - 06:00	1.00	SUR	1	CONNECTIONS AND CURVEYS	
	4/1/2010	06:00 - 10:00	4.00	CIRC	1	TROUBLE SHOOT MWD, TOOL FAILURE. CIRCULATE HIGH VIS SWEEP
10:00 - 11:30		1.50	TRP	13	TRIP OUT OF THE HOLE FOR MWD FAILURE	
11:30 - 12:00		0.50	CIRC	1	MIX AND PUMP TRIP SLUG	
12:00 - 15:30		3.50	TRP	13	TRIP OUT OF HOLE FOR MWD	
15:30 - 17:00		1.50	TRP	1	CHANGE OUT BIT AND MOTOR,P/U DIRECTIONAL TOOLS AND SHOCK SUG ORIENT AND TEST	
17:00 - 19:00		2.00	TRP	2	TRIP IN THE HOLE 2828 FT FILL PIPE	
19:00 - 19:30		0.50	CIRC	1	CIRC GAS FROM THE WELL	
19:30 - 20:30		1.00	TRP	2	TRIP IN THE HOLE	
20:30 - 21:00		0.50	CIRC	1	FILL THE PIPE AND CIRC OUT THE GAS AT THE WINDOW	
21:00 - 22:00		1.00	TRP	2	TRIP IN THE HOLE WASH AND REAM 50 FEET TO BOTTOM	
22:00 - 23:30		1.50	OTH		TROUBLE SHOOT THE MWD TOOLS	
23:30 - 05:00		5.50	DRL	2	DIRECTIONAL DRILL FROM 7055 FT TO 7134 83' 15.1/HR	
05:00 - 06:00		1.00	SUR	1	SURVEYS AND CONNECTIONS	

## Operations Summary Report

Well Name: GH 9  
 Location: 20- 8-S 21-E 26  
 Rig Name: AZTEC

Spud Date: 3/23/2010  
 Rig Release: 4/16/2010  
 Rig Number: 777

Date	From - To	Hours	Code	Sub Code	Description of Operations
4/2/2010	06:00 - 15:00	9.00	DRL	2	DIRECTIONAL DRILL F/7134 T/ 7258 FT'
	15:00 - 16:00	1.00	RIG	1	RIG SERVICE
	16:00 - 17:00	1.00	DRL	2	DIRECTIONAL DRILL FROM 7258 FT TO 7270 FT.
	17:00 - 18:00	1.00	SUR	1	SURVEY & CONNECTIONS
	18:00 - 04:00	10.00	DRL	2	DIRECTIONAL DRILL FROM 7270 FT TO 7380 110' 11'/HR
	04:00 - 04:30	0.50	CIRC	1	CIRC UP SAMPLES
4/3/2010	04:30 - 06:00	1.50	DRL	2	DIRECTIONAL DRILL F/7380 T/7400 20' 13.3'/HR
	06:00 - 13:00	7.00	DRL	2	DIRECTIONAL DRILL F/7400 T/7452
	13:00 - 14:30	1.50	CIRC	1	PUMP FRESH WATER/HIGH VIS SWEEP
	14:30 - 17:00	2.50	TRP	10	TRIP OUT OF THE HOLE FOR BIT, LAY DOWN 11 JTS OF DRILL PIPE
	17:00 - 17:30	0.50	CIRC	1	MIX AND PUMP TRIP SLUG
	17:30 - 19:30	2.00	TRP	10	TRIP OUT OF HOLE
	19:30 - 21:30	2.00	TRP	1	LAYD DOWNBIT, MUD MOTOR, XO SUBS AND SHOCK SUB SURFACE TEST
	21:30 - 23:00	1.50	TRP	1	MOTOR EXCESSIBE PRESSURE =3000 + PSI
	23:00 - 00:00	1.00	TRP	2	CHANGE OUT MOTORS AND REORIENTATE M W D TOOLS SURFACE TEST
	00:00 - 00:30	0.50	CIRC	1	MOTOR= 2000 PSI
4/4/2010	00:30 - 01:30	1.00	TRP	2	TRIP IN THE HOLE TO 2820 FEET
	01:30 - 02:00	0.50	CIRC	1	CIRC OUT GAS @ 2820 FEET
	02:00 - 03:00	1.00	TRP	2	TRIP IN THE HOLE TO 5161 FEET
	03:00 - 05:00	2.00	DRL	7	CIRC OUT GAS & WATER @ 5200 FT (APPROX 40 TO 50 BBL'S FORMATION WATER)
	05:00 - 06:00	1.00	DRL	2	TRIP IN THE TO 7150 FEET
	06:00 - 08:30	2.50	DRL	2	TROUGH HOLE FROM 7150 FT TO 7160 FEET FOR SIDE TRACK #1
	08:30 - 10:30	2.00	DRL	2	TIME DRILL F/7160 T/7161
	10:30 - 12:00	1.50	CIRC	1	TIME DRILL F/7161 T/7170
	12:00 - 13:30	1.50	TRP	13	DIRECTIONAL DRILL F/7170 T/7189
	13:30 - 14:00	0.50	CIRC	1	TROUBLE SHOT MWD-TOOL FAILURE
	14:00 - 16:00	2.00	TRP	1	TRIP OUT OF HOLE FOR MWD TO WINDOW
	16:00 - 17:30	1.50	TRP	1	MIX AND PUMP TRIP SLUG
	17:30 - 18:00	0.50	TRP	13	TRIP OUT OF HOLE FOR MWD
	18:00 - 18:30	0.50	CIRC	1	CHANGE OUT MWD,CHECK MOTOR AND BIT. TEST TOOLS
	18:30 - 20:00	1.50	TRP	2	TRIP IN HOLE
	20:00 - 20:30	0.50	CIRC	1	FILL PIPE AND CIRC OUT GAS @ 2818 FEET
	20:30 - 21:30	1.00	TRP	2	TRIP IN THE HOLE
	21:30 - 22:00	0.50	OTH		TRIP IN THE HOLE TO 7150
4/5/2010	22:00 - 00:00	2.00	DRL	2	ORINATE TOOLS THROUGH THE SIDE TRACK FROM 7150 FEET TO 7160 FEET
	00:00 - 01:00	1.00	OTH		DIRECTIONAL DRILL FROM 7189 FEET TO 7233
	01:00 - 04:30	3.50	TRP	13	TROUBLE SHOOT M.W.D. TOOLS
	04:30 - 06:00	1.50	TRP	1	TRIP FOR M.W.D. FAILURE
	06:00 - 06:30	0.50	TRP	1	CHANGE MWD TOOLS AND CHECK MOTOR AND BIT
	06:30 - 10:00	3.50	TRP	13	CHANGE OUT MWD AND TEST TOOLS
	10:00 - 11:00	1.00	CIRC	1	TRIP IN HOLE TO SIDE TRACK
	11:00 - 17:00	6.00	DRL	2	CIRCULATE GAS AND WATER OUT OF HOLE, ORIENT TOOL FACE AND WASH PAST SIDETRACK
	17:00 - 18:00	1.00	SUR	1	DIRECTIONAL DRILL F/7233 T/
	18:00 - 19:00	1.00	DRL	2	SURVEYS AND CONNECTIONS
19:00 - 22:00	3.00	OTH		DIRECTIONAL DRILL FROM 7494 FT TO 7515 FT.	
					TROUBLE SHOOT M.W.D. TOOLS

## Operations Summary Report

Well Name: GH 9  
 Location: 20- 8-S 21-E 26  
 Rig Name: AZTEC

Spud Date: 3/23/2010  
 Rig Release: 4/16/2010  
 Rig Number: 777

Date	From - To	Hours	Code	Sub Code	Description of Operations
4/5/2010	22:00 - 23:00	1.00	TRP	13	TRIP TO THE WINDOW
	23:00 - 00:00	1.00	CIRC	1	MIX & PUMP TRIP SLUG
	00:00 - 01:30	1.50	TRP	13	TRIP FOR MWD FAILURE
	01:30 - 03:00	1.50	TRP	1	CHANGE OUT MWD TOOLS & BIT TEST MOTOR AND MWD TOOLS(O.K.)
4/6/2010	03:00 - 06:00	3.00	TRP	2	TRIP IN THE HOLE WITH BHA# 9
	06:00 - 07:00	1.00	TRP	13	TRIP IN HOLE
	07:00 - 08:30	1.50	TRP	13	WENT IN OLD SIDE TRACK HOLE. TRIP OUT TO SIDE TRACK, ORIENT TOOLFACE AND TRIP IN HOLE
4/7/2010	08:30 - 09:00	0.50	REAM	1	WASH 45' TO BOTTOM
	09:00 - 02:00	17.00	DRL	1	DIRECTIONAL DRILL F/7515 T/ 8098 FEET 783' 34.2'/HR WOB 14/15 RPM 235 GPM 140
	02:00 - 02:30	0.50	CIRC	1	CIRC UP SAMPLES @ 8098 FEET
	02:30 - 06:00	3.50	DRL	2	DIRECTIONAL DRILL FROM 8098 FEET TO 8129 31' 8.8'/HR
	06:00 - 10:30	4.50	DRL	2	DIRECTIONAL DRILL F/8129 T/8255 126' 28'/HR WOB 14/15 RPM 235 GPM 140
	10:30 - 11:30	1.00	TRP	14	SHORT TRIP TO 7500', WASH 60' TO BOTTOM- NO FILL
	11:30 - 19:00	7.50	CIRC	1	CIRCULATE AND CONDITION HOLE FOR LINER. PUMP FRESH WATER/ HIGH VIS SWEEP
	19:00 - 21:00	2.00	TRP	2	TRIP OUT TO THE WINDOW@ 4858 FT
	21:00 - 22:00	1.00	CIRC	1	MIX AND PUMP TRIP SLUG
	22:00 - 00:00	2.00	TRP	2	TRIP OUT OF THE HOLE FOR LINNER S.L.M.
4/8/2010	00:00 - 01:30	1.50	TRP	1	BREAK OUT AND LAY DOWN DIRECTIONAL TOOLS
	01:30 - 03:00	1.50	CSG	1	HOLD SAFETY MEETING AND RIG UP LAY DOWN MACHINE AND CASING CREWS
	03:00 - 06:00	3.00	CSG	2	RUN 3 1/2" P-110 FLUSH JT PERFORATED CASING
	06:00 - 08:00	2.00	CSG	2	PICK UP 3287.3' OF 3 1/2",P-110, 9.2# ULTRA FLUSH JT LINER
	08:00 - 09:00	1.00	CSG	2	RIG DOWN CASING CREW AND LAY DOWN TRUCK
	09:00 - 11:00	2.00	TRP	2	TRIP IN HOLE WITH LINER AND SET @ 8152'. TOP OF LINER 4855'. TOP PERF 5421'. EVERY OTHER JOINT PERFERATED.
	11:00 - 12:00	1.00	CIRC	1	CIRCULATE GAS OUT OF HOLE AND RIG UP LAY DOWN TRUCK
	12:00 - 15:00	3.00	TRP	3	LAY DOWN 110 JOINTS OF DRILL PIPE
	15:00 - 15:30	0.50	CSG	1	RIG DOWN LAY DOWN TRUCK
	15:30 - 16:00	0.50	TRP	2	TRIP OUT OF HOLE
	16:00 - 16:30	0.50	LOG	4	HOLD SAFETY MEETING AND RIG UP WIRELINE TRUCK
	16:30 - 19:00	2.50	LOG	4	RUN GAUGE RING AND JUNK BASKET TO 4855'. R.I.H. WITH RPB ANS SET @ 4793', POOH AND RIG DOWN WIRELINE TRUCK
	19:00 - 20:30	1.50	TRP	1	PICK UP WHIPSTOCK AND MILLING ASSEMBLY AND ORIENTSCIENTIFIC MUELSHOE
	20:30 - 23:30	3.00	TRP	2	TRIP IN THE HOLE (SLM) TO 4781'
23:30 - 00:30	1.00	LOG	4	HELD SAFETY MEETING, RIG UP WIRELINE TRUCK AND RUN IN THE HOLE WITH GYRO TOOL	
4/9/2010	00:30 - 01:00	0.50	LOG	4	SEAT GYRO TOOL AND SET WHIPSTOCK. TOP AT 4775, BOTTOM AT 4781, SET AT 147 DEGREE TOOLFACE
	01:00 - 01:30	0.50	LOG	4	PULL OUT OF THE HOLE WITH GYRO TOOL AND RIG DOWN WIRELINE TRUCK
	01:30 - 06:00	4.50	FISH	1	MILL WINDOW FROM 4775 TO 4780 35' BOTTOMS UP FLARE
	06:00 - 08:30	2.50	DRL	1	MILL FROM 4780 TO 4784
	08:30 - 09:00	0.50	CIRC	1	PUMP AND CIRC OUT HIGH VIS SWEEP
	09:00 - 11:00	2.00	TRP	10	TRIP OUT OF THE HOLE FOR BIT #11 AND DIRECTIONAL TOOLS
	11:00 - 12:00	1.00	RIG	6	CUT DRILLING LINE
	12:00 - 14:00	2.00	TRP	1	PICK UP DIRECTIONAL TOOLS, ORIENT AND TEST
	14:00 - 16:00	2.00	TRP	2	TRIP IN THE HOLE

## Operations Summary Report

Well Name: GH 9  
 Location: 20- 8-S 21-E 26  
 Rig Name: AZTEC

Spud Date: 3/23/2010  
 Rig Release: 4/16/2010  
 Rig Number: 777

Date	From - To	Hours	Code	Sub Code	Description of Operations
4/9/2010	16:00 - 18:00	2.00	LOG	4	RIG UP WIRELINE TRUCK AND RUN IN THE HOLE WITH GYRO TOOL, AND ORIENT AT WINDOW
	18:00 - 21:00	3.00	DRL	2	DIRECTIONAL DRILL WITH GYRO TOOL FROM 4784 TO 4850 66' ROP - 18.9/HR GPM - 124 WOB - 10/15
	21:00 - 22:30	1.50	LOG	4	POOH WITH GYRO, MAKE CONNECTION, RIH WITH GYRO AND SEAT
	22:30 - 00:30	2.00	DRL	2	DIRECTIONAL DRILL WITH GYRO TOOL FROM 4850 TO 4892 42' ROP - 21/HR GPM - 124 WOB - 10/15
	00:30 - 01:00	0.50	OTH		TAKE MWD SURVEY AND VERIFY GYRO DATA
	01:00 - 02:00	1.00	DRL	2	DIRECTIONAL DRILL WITH GYRO FROM 4892 TO 4912' 20' ROP - 20/HR GPM - 124 WOB - 10/15
	02:00 - 03:00	1.00	LOG	4	POOH WITH GYRO AND RIG DOWN WIRELINE TRUCK
4/10/2010	03:00 - 06:00	3.00	DRL	2	DIRECTIONAL DRILL FROM 4912 TO 5015
	06:00 - 17:00	11.00	DRL	2	DIRECTIONAL DRILL FROM 5015 TO 5301 286' ROP - 26/HR GPM - 140 WOB - SLIDING 25-30, ROTATING 13-15
	17:00 - 18:00	1.00	SUR	1	SURVEYS AND CONNECTIONS
4/11/2010	18:00 - 04:30	10.50	DRL	1	DIRECTIONAL DRILL FROM 5301 TO 5765' 464' ROP - 44.2/HR GPM - 140 WOB - 15/25 ENTERED ZONE @ 5404 MD, 5192 TVD
	04:30 - 06:00	1.50	SUR	1	CONNECTIONS AND SURVEYS
	06:00 - 07:00	1.00	DRL	2	DIRECTIONAL DRILL FROM 5765' TO 5827' 62' ROP - 62/HR WOB - 14 GPM - 140
	07:00 - 11:00	4.00	TRP	10	TRIP OUT OF THE HOLE FOR BIT #12 PUMPED FRESH WATER/VIS SWEEP PRIOR TO COMING OUT OF THE HOLE
	11:00 - 13:00	2.00	TRP	1	LAY DOWN AND PICK UP BIT AND MOTOR, ORIENT AND TEST
	13:00 - 15:00	2.00	TRP	10	TRIP IN THE HOLE TO 4770'
	15:00 - 16:30	1.50	RIG	6	SLIP AND CUT DRLG LINE, SLIP ON NEW SPOOL
	16:30 - 17:00	0.50	TRP	10	TRIP IN THE HOLE - GAINED 42 BBLS OF PRODUCTION WATER ON THE TRIP
	17:00 - 17:30	0.50	REAM	1	WASH 30' TO BOTTOM
	17:30 - 03:30	10.00	DRL	2	DIRECTIONAL DRILL FROM 5827' TO 6145' 318' RPO - 31.8 WOB - 15/25 GPM - 160
4/12/2010	03:30 - 06:00	2.50	SUR	1	CONNECTIONS AND SURVEYS
	06:00 - 14:00	8.00	DRL	2	DIRECTIONAL DRILL FROM 6145 TO 6415 270' ROP - 33.75/HR WOB - 15/18 ROTATING, 38/40 SLIDING GPM - 160 PUMPED WATER/VIS SWEEP PRIOR TO SHORT TRIP
	14:00 - 14:30	0.50	TRP	14	SHORT TRIP TO 5815'
	14:30 - 05:00	14.50	DRL	2	DIRECTIONAL DRILL FROM 6415' TO 6661' 246' ROP - 16.9/HR WOB - 14/30 GPM - 140/160
4/13/2010	05:00 - 06:00	1.00	SUR	1	CONNECTIONS AND SURVEYS
	06:00 - 11:00	5.00	TRP	10	TRIP OUT OF THE HOLE PUMPED WATER/VIS SWEEP PRIOR TO TRIPPING OUT FUNCTION PIPE RAMS AND BLIND RAMS
	11:00 - 12:00	1.00	TRP	1	CHANGE OUT MOTOR AND BIT, ORIENT AND TEST
	12:00 - 15:30	3.50	TRP	2	TRIP IN THE HOLE RE LOG HOLE WITH GAMA FROM 6651 TO 6661
	15:30 - 03:30	12.00	DRL	2	DIRECTIONAL DRILL FROM 6661 TO 7125 464' ROP - 38.66/HR GPM - 145 WOB - 14/30
4/14/2010	03:30 - 06:00	2.50	SUR	1	CONNECTIONS AND SURVEYS
	06:00 - 10:00	4.00	DRL	2	DIRECTIONAL DRILL FROM 7125 TO 7250 125' ROP - 31.25/HR GPM - 145 WOB - 14/30
	10:00 - 11:00	1.00	TRP	14	SHORT TRIP TO 6620 GAINED 30 BBLS OF INJECTION WATER/OIL ON TRIP
	11:00 - 16:00	5.00	DRL	2	PUMPED WATER/VIS SWEEP PRIOR TO TRIP DIRECTIONAL DRILL FROM 7250 TO 7507 257'

## Operations Summary Report

Well Name: GH 9  
 Location: 20- 8-S 21-E 26  
 Rig Name: AZTEC

Spud Date: 3/23/2010  
 Rig Release: 4/16/2010  
 Rig Number: 777

Date	From - To	Hours	Code	Sub Code	Description of Operations
4/14/2010	11:00 - 16:00	5.00	DRL	2	ROP - 51.4'/HR GPM - 145 WOB - 14/30
	16:00 - 18:00	2.00	SUR	1	CONNECTIONS AND SURVEYS
	18:00 - 01:00	7.00	DRL	2	DIRECTIONAL DRILL FROM 7507 TO 7766 (TD) 259'
					ROP - 37'/HR WOB - 14/30 GPM - 145
	01:00 - 02:30	1.50	SUR	1	CONNECTIONS AND SURVEYS
	02:30 - 03:00	0.50	CIRC	1	CIRCULATE UP SAMPLE/BOTTOMS UP
4/15/2010	03:00 - 04:30	1.50	TRP	14	SHORT TRIP TO 6651, GAINED 20 BBLS
	04:30 - 06:00	1.50	CIRC	1	CIRCULATE FOR CASING
	06:00 - 08:30	2.50	TRP	2	TRIP OUT TO THE WINDOW
	08:30 - 09:30	1.00	CIRC	1	CIRCULATE BOTTOMS UP AND PUMP SLUG NO FLARE NO EXTRA GAS UNITS
	09:30 - 12:00	2.50	TRP	2	TRIP OUT OF THE HOLE
	12:00 - 13:00	1.00	TRP	1	LAY DOWN DIRECTIONAL TOOLS
	13:00 - 14:00	1.00	CSG	1	HELD SAFETY MEETING AND RIG UP CASING CREW
	14:00 - 16:00	2.00	CSG	2	RUN 3.5" 9.2# P-110 UFJ CASING GAINED 50 BBLS IN 2 HRS
	16:00 - 17:00	1.00	CIRC	1	BULLHEAD 50 BBLS OF 10.8 PPG MUD
	17:00 - 18:30	1.50	CSG	2	RUN 91 JOINTS OF 3.5", 9.2#, P-110, ULTRA FLUSH JOINT CASING
	18:30 - 19:00	0.50	CSG	1	RIG DOWN CASING CREW
	19:00 - 20:00	1.00	TRP	2	TRIP IN THE HOLE WITH LINER TO THE WINDOW GAINED 50 BBLS IN 3 HRS
	20:00 - 20:30	0.50	CIRC	1	BULL HEAD 50 BBLS OF 9.7 PPG MUD
	20:30 - 22:00	1.50	TRP	2	TRIP IN THE HOLE WITH LINER
	22:00 - 23:00	1.00	CIRC	1	CIRCULATE OUT GAS, 4446 MAX UNITS, 15 - 20' FLARE
	23:00 - 23:30	0.50	CSG	2	ATTEMPT TO SET CASING HANGER,
	23:30 - 03:30	4.00	TRP	3	SLUG PIPE AND LAY DOWN DRILL PIPE, LINER STILL HANGING ON DRILL STRING
	4/16/2010	03:30 - 06:00	2.50	OTH	
06:00 - 08:00		2.00	CSG	2	P/U 3 JOINTS OF CASING AND LINER HANGER RAN A TOTAL OF 94 JOINTS OF 3.5", 9.2#, P-110, ULTRA FLUSH JOINT
08:00 - 09:30		1.50	CSG	2	PICK UP 75 JOINTS OF HWDP
09:30 - 11:00		1.50	CIRC	1	CIRCULATE OUT GAS - 10-12' FLARE, BULLHEAD 40 BBLS
11:00 - 12:30		1.50	CSG	2	TRIP IN THE HOLE WITH LINER
12:30 - 13:00		0.50	CSG	4	SET LINER HANGER, SHOE AT 7757', TOP OF LINER AT 4790' PERFORATED PIPE EVERY OTHER JOINT FROM 7757' TO 5496'
13:00 - 14:30		1.50	CIRC	1	CIRCULATE OUT GAS AND SLUG PIPE BOTTOMS UP FLARE 10-12'
14:30 - 18:30		4.00	TRP	3	LAY DOWN DRILL PIPE AND HANGER
18:30 - 19:00		0.50	CSG	1	RIG DOWN LAYDOWN TRUCK
19:00 - 19:30		0.50	LOG	4	RIG UP WIRELINE TRUCK
19:30 - 21:00		1.50	LOG	4	RIH WITH 4.5" GAGE RING AND JUNK BASKET TO 4375, POOH AND P/U RBP AND RIH AND SET REMOVABLE BRIDGE PLUG AT 4260', POOH AND RIG DOWN WIRELINE TRUCK
21:00 - 23:00		2.00	BOP	1	NIPPLE DOWN BOP, FLOW LINE AND CHOKE MANIFOLD
23:00 - 01:00		2.00			CLEAN MUD TANKS
	01:00 - 06:00	5.00	LOC	4	RIG RELEASED AT 01:00 HRS ON 4/16/2010 RIG DOWN

## Operations Summary Report

Well Name: GH 9  
 Location: 20- 8-S 21-E 26  
 Rig Name: ROCKY MTN WS

Spud Date: 3/23/2010  
 Rig Release:  
 Rig Number: 3

Date	From - To	Hours	Code	Sub Code	Description of Operations
4/20/2010	06:00 - 16:00	10.00	BOP	2	<p>"TIGHT HOLE"; Initial reort ofwell completion</p> <p>On 4/20/10 SICP=0#. NDWH and NU BOP's. Tally and rabbit in the hole with a 4-3/4" bit and 5-1/2" csg.scrapers and 2-7/8" used tbgs.with ball tet sub to tag of RBP at 4260'. Circ.hole with 120 bbl.of 2% KCL water. Drop test ball and test tbgs.to 4000# and held OK. Reverse out ball. POOH with bit and tbgs..RIH with ret.head and tbgs.to top of RBP at 4260' and tag and pull ret.head to 4240' and SIFN. On 4/21/10 will release RBP at 4260' and POOH and pick up 2-3/8" hydril tbgs.and 2-7/8" tbgs.and go into upper slotted liner to prepare for acid jobs on 4/22/10.</p> <p>Casing size: 3-1/2" 9.3# and 5-1/2" 15.5#            Casing depth: 8152' &amp; 7757'</p>
4/21/2010	06:00 - 16:00	10.00	LOC	2	<p>"TIGHT HOLE" Initial report of well completion.</p> <p>On 4/21/10 SITP and SICP=0#. Latch onto and release 5-1/2" RVP at 4160' and POOH with plug and tbgs..Tally and rabbit in the hole with 60 jts. (1830) of 2-3/8" hydril tbgs., x-over and 152 jts.of 2-7/8" tg.to 6578" tbgs.to 6578'. Had to pump a total of 65 bbl.of brine today to control water, oil and gas flow. SIFN. On 4/22/10 will acidize 3-1/2" lateral.</p> <p>Casing size: 3-1/2" 9.3" and 5-1/2" 15.5#            Casing depth: 8152' &amp; 7757'</p>
4/22/2010	06:00 - 16:00	10.00	BOP	1	<p>"TIGHT HOLE: Initial report of well completion</p> <p>On 4/19/10 MIRU Rocky Mtn.WS to start completion of this dual lateral well. Spot equipment and SDFN. On 4/20/10 will NU BOP's and RIH with bit and scraper.</p> <p>Casing size: 3-1/2" 9.33 and 5-1/2" 15.5#            Casing depth: 8152' &amp; 7757'</p>
4/23/2010	06:00 - 16:00	10.00	STIM	1	<p>"TIHGT HOLE" : Initial report of well completion</p> <p>On 4-22/10 STIP=425# and SICP=450# with 2-3/8" and 2-7/8" tbgs.string with 2-3/8" hydril tbgs.string at 6578'. Circ.80 bbl.of 2% KCL water down the tbgs...MIRU Halliburton acid crew and acidize the upper 3-1/2" lateral in 2 stages of acid with each stage consisting of 7000 gal.each of 15% HCL with additives. All acid was spotted to the bottom of the tbgs.prio to bullheading all acid into the formation at depths below. With tbgs.tail at 6578' pump the 7000 gal.of acid and flush with 5 bbl.of water and 35 bbl.of 10# brine. Max.psi=3400#; Ave=2400'; Max.rate=8.5'; Ave=6 BPM; ISIP=1000#; Pull tg.tail to 6230' and acidize the lateral with 7000 gal.of acid and flush with 10 bbl. of water and 35 bbl.of brine water. Max.psi=1900#; Ave=1200#; Max.rate=8.5' Ave=7 PBMP; ISIP=1080#. RDMO Halliburton. Pull tbgs.tail out of the liner to 4700' and SIFN. On 4/23/10 will flow test and or pull and lay down the 2-3/8 hydril string.</p> <p>LLTR: 500</p> <p>Perfs:            slotted 3-1/2 liner</p> <p>Casing size: 3-1/2" 9.3# and 5-1/2" 15.5#            Casing depth: 8152 &amp; 7757'</p>
4/26/2010	06:00 - 16:00	10.00	PTST	2	<p>"TIGHT HOLE"; Initial report of well completion</p> <p>On 4/23/10 SITP=200# and SICP=575#. RU flow back tank. Open csg.to tank on a</p>

## Operations Summary Report

Well Name: GH 9  
 Location: 20-8-S 21-E 26  
 Rig Name: ROCKY MTN WS

Spud Date: 3/23/2010  
 Rig Release:  
 Rig Number: 3

Date	From - To	Hours	Code	Sub Code	Description of Operations
4/26/2010	06:00 - 16:00	10.00	PTST	2	<p>4/64" choke and flowed csg. for 7 hours and filled flow back tank and recovered a total of 410 bbl.of oil (w/o shirinkage) and 55 bbl.of water. NOTE: The fluid is cold and these could change but the samples were heated during the flowback with the final oil cut at 100%. Initial FCP was 575# at 8:00AM on a 4/64" choke and the following are the FCP's on a 40/64" chke during the day: 9:00AM 275# (142 bbl.rec.): 10:00AM=200# (220 rec.); 11:00M=150# (305 rec.); noon= 100# (425 rec.); 2:00PM-70# WIT H465 bbl .total recoverd.Had a Total load of 500 bbl.to recover. Have rec. an est.55 bbl.of water today. SIFW. On 4/2/10 will heat flow back tank and check pressures and attempt to circ. well to POOH with tbg..</p> <p>Casing size: 3-1/2" 9.3# and 5 -1/2" 15.5#            Casing depth: 8162' &amp; 7757'</p> <p>Load from yesterday: 500            Minus daily reocvery: 55            LLTR: 445</p> <p>Perfs:            slotted 3-1/2 liner.</p>
4/27/2010	06:00 - 16:00	10.00	HOT	1	<p>On 4/26/10 SITP=260# and SICP=550#. MIRU additional flow back tank. Left well SI for the day while hot oiler heated and transferred fluid from flow back tank. On 4/27/10 will bleed off well and attempt to POOH with tbg.and run production string.</p> <p>LLTR: 445</p> <p>Perfs: slotted 3-1/2 liner.</p> <p>Casing size: 3-1/2" 9.3# and 5-1/2" 15.5#            Casing depth: 8152' &amp; 7757'</p>
4/28/2010	06:00 - 16:00	10.00	CIRC	1	<p>"TIGHT HOLE": Initial report of well completion.</p> <p>On 4/27/10 SITP=290# and SICP=600#. Bled down the well and recovered approx.320 bbl.of fluid with an est 60% oil cut (fluid does not allow for shrinkage). FCP of 60# on a full 1" line and holding. Circ.well with 140 bbl.of 10# brine. Csg.continued to flow during pull out of 2-7/8" tbg.and died with the 2-3/8" hydril tbg.at surface. Lay down the 2-3/8" hydril work string. RIH with production tbg.as below. Attempt ot set anchor catcher and would not set. NUWH and SIFN. On 4/28/10 will run pump and rods and RDMO Rocky Mtn. WS.</p> <p>Tbg.Detail: (4/27/10): Barred NC; 1jt.tb.; SN; 5-1/2" B-2 anchor catcher; 151 jts.of tbg.to surface. All tbg.is used 2-7/8 EUE 8rd J-55 6.5#. Tbg.tail at 4760.30'; SN at 4729.01'; Anchor at 4727.14';. NOTE: Anchor is not set.</p> <p>Details: NC=0.44'; 1 jt.of tbg.=30.85'; SN=1.12'; AC=2.75'; 151 jts.of tbg.=4711.14'; KB=14'</p> <p>Casing size: 3-1/2" 9.3# and 5-1/2" 15.5#            Casing depth: 8152' &amp; 7757'</p> <p>Load from yesterday: 445            Minus daily recovery: 45            Plus water today: 140</p>

## Operations Summary Report

Well Name: GH 9  
 Location: 20-8-S 21-E 26  
 Rig Name: ROCKY MTN WS

Spud Date: 3/23/2010  
 Rig Release:  
 Rig Number: 3

Date	From - To	Hours	Code	Sub Code	Description of Operations
4/28/2010	06:00 - 16:00	10.00	CIRC	1	LLTR: 540
4/29/2010	06:00 - 16:00	10.00	HOT	1	<p>Perfs:            slotted 3-1/2 liner.</p> <p>On 4/28/10 SITP and SICP=50#. Pump 40 bbl.of hot brine down the tbg.to kill. Bucket test new pump and RIH with new pump and rods as below. Seat pump and load tbg.with 1/2 bbl.of water and long stroke pump to 700# and held OK. Clamp off polish rod and RDMO Rocky Mtn.WS. Turn well over to production. Final report of this completion in the upper lateral.</p> <p>Rod and pump detail: (4/28/10): 2-1/2" x 1-3/4"x20x23x23 RHAC Wetherford pump; 35-3/4" guided rods; 48-3/4" plain rods; 55-7/8 plain rods; 49-1" plain rods; 1-2"x1" pony rod; 1-1/2" x 26' polish rod. All rods are class "D".</p> <p>Tbg.Detail: (4/27/10): Barred NC; 1 jt.tbg.; SN; 5-1/2" B-2 anchor catcher; 151 jts.of tbg. to surface. All tbg.is used 2-7/8" EUE 8rd J-55 6.5#. Tbg.tail at 4760.20'; SN at 4729.01'; Anchor at 4727.14'. NOTE: Anchor is not set.</p> <p>Details: NC=0.44'; 1 jt of tbg.=30.85'; SN=1.12'; AC=2.75'; 151 jts.of tbg.=4711.14'; KB=14'</p> <p>Load from yesterday: 540            Plus water today: 40            LLTR: 580</p> <p>Perfs:            slotted 3-1/2 liner upper liner acidized only and production will be from that lateral until a later time.</p> <p>CASING SIZE: 3-1/2" 9.3# and 5-1/2" 15.5#            CASING DEPTH: 8152' &amp; 7757'</p>
6/14/2010	06:00 - 16:00	10.00	LOC	3	<p>TIGHT HOLE - Resumption of report discontinued on 4/19/10: This work will be to complete the well in the lower lateral.</p> <p>On 6/11/10 MIRU Rocky Mountain WS. Left the well pumping to production over the weekend.</p> <p>24 Hour Forecast: Will POOH w/ rods &amp; pump &amp; tbg &amp; RIH w/ tool to pull whipstock.</p> <p>Rod and pump detail: (4/28/10): 2-1/2" x 1-3/4"x20x23x23 RHAC Wetherford pump; 35-3/4" guided rods; 48-3/4" plain rods; 55-7/8 plain rods; 49-1" plain rods; 1-2"x1" pony rod; 1-1/2" x 26' polish rod. All rods are class "D".</p> <p>Tbg.Detail: (4/27/10): Barred NC; 1 jt.tbg.; SN; 5-1/2" B-2 anchor catcher; 151 jts.of tbg. to surface. All tbg.is used 2-7/8" EUE 8rd J-55 6.5#. Tbg.tail at 4760.20'; SN at 4729.01'; Anchor at 4727.14'. NOTE: Anchor is not set.</p> <p>Details: NC=0.44'; 1 jt of tbg.=30.85'; SN=1.12'; AC=2.75'; 151 jts.of tbg.=4711.14'; KB=14'</p> <p>Perfs:</p>

## Operations Summary Report

Well Name: GH 9  
 Location: 20- 8-S 21-E 26  
 Rig Name: ROCKY MTN WS

Spud Date: 3/23/2010  
 Rig Release:  
 Rig Number: 3

Date	From - To	Hours	Code	Sub Code	Description of Operations
6/14/2010	06:00 - 16:00	10.00	LOC	3	<p>slotted 3-1/2" liner upper liner acidized only and production will be from that lateral until a later time.</p> <p>CASING SIZE: 3-1/2" 9.3# and 5-1/2" 15.5#            CASING DEPTH: 8152' &amp; 7757'</p>
6/15/2010	06:00 - 16:00	10.00	OTH		<p>TIGHT HOLE - Resumption of report discontinued on 4/19/10: This work will be to complete the well in the lower lateral.</p> <p>On 6/14/10 - RU hot oiler &amp; circ 75 bbls of hot 2% KCL snake water down the csg. Unseat standing valve &amp; flush tbg w/ 75 bbls of the same. POOH w/ polish rod &amp; rods &amp; plunger &amp; standing valve for the tbg pump. NDWH. Release tbg anchor. NU BOP's. POOH w/ tbg &amp; pump barrel a&amp; anchor. SIFN.</p> <p>24 Hour Forecast: Will RIH w/ whipstock ret. tool to attempt to pull &amp; retrieve whipstock.</p> <p>Csg Size: 3-1/2" 9.3# &amp; 5-1/2" 15.5#            Csg Depth: 8152' &amp; 7757'</p> <p>Tbg.Detail: (4/27/10): Barred NC; 1 jt.tbg.; SN; 5-1/2" B-2 anchor catcher; 151 jts.of tbg. to surface. All tbg.is used 2-7/8" EUE 8rd J-55 6.5#. Tbg.tail at 4760.20'; SN at 4729.01'; Anchor at 4727.14'. NOTE: Anchor is not set.</p> <p>Details: NC=0.44'; 1 jt of tbg.=30.85'; SN=1.12'; AC=2.75'; 151 jts.of tbg.=4711.14'; KB=14'</p> <p>Perfs:            slotted 3-1/2" liner upper liner acidized only and production will be from that lateral until a later time.</p>
6/16/2010	06:00 - 16:00	10.00	OTH		<p>TIGHT HOLE - Resumption of report discontinued on 4/19/10: This work will be to complete the well in the lower lateral.</p> <p>On 6/15/10 SICP = 50#. RIH w/ whipstock ret. tool, jars &amp; 4 - 3-1/2" DC's &amp; tbg. Engage whipstock @ 4775' &amp; jar whipstock free. POOH w/ whipstock &amp; lay down along w/ the tools. RIH w/ 5-1/2" ret. head &amp; ball test sub &amp; 2-7/8" tbg to 4660' &amp; SIFN.</p> <p>24 Hour Forecast: Will attempt to pull RBP.</p> <p>Csg Size: 3-1/2" 9.3# &amp; 5-1/2" 15.5#            Csg Depth: 8152' &amp; 7757'</p> <p>Perfs:            Slotted 3-1/2" liner upper liner acidized only and production will be from that lateral until a later time.</p>
6/17/2010	06:00 - 16:00	10.00	EQT	4	<p>TIGHT HOLE - Resumption of report discontinued on 4/19/10: This work will be to complete the well in the lower lateral.</p>

## Operations Summary Report

Well Name: GH 9  
 Location: 20-8-S 21-E 26  
 Rig Name: ROCKY MTN WS

Spud Date: 3/23/2010  
 Rig Release:  
 Rig Number: 3

Date	From - To	Hours	Code	Sub Code	Description of Operations
6/17/2010	06:00 - 16:00	10.00	EQT	4	<p>On 6/16/10 SITP and SICP=40#. Bled down. With tbg.and ret head at 4660' drop ball to test tbgin tbg.sub and test tbg.to 3000# and held OK. Attempt to circ.out ball and could not establish circ.Swab tbg.dry and POOH with tbg.Remove ball and test sub. RIH with ret.head and latch onto and release RBP at 4792'. POOH with plug and tbg..SIFN. On 6/17/10 will pick up 2-3/8" hydrill and 2-7/8" tbg.and attempt to go into bottom lateral. Too windy to pick up tb.on PM of 6/16/10</p> <p>24 Hour Forecast: Too windy to pick up tbg.</p> <p>Csg Size: 3-1/2" 9.3# &amp; 5-1/2" 15.5#            Csg Depth: 8152' &amp; 7757'</p> <p>Load from yesterday: 150            Plus water today: 250            LLTR: 400</p> <p>Perfs:            Slotted 3-1/2 liner upper liner acidized only and production will be from that lateral until a later time.</p>
6/18/2010	06:00 - 16:00	10.00	EQT	4	<p>TIGHT HOLE - Resumption of report discontinued on 4/19/10: This work will be to complete the well in the lower lateral.</p> <p>On 6/17/10 - SITP = 40#. Bled off. Pump 10 bbls of 2% KCL water. Tally &amp; PU &amp; RIH w/ 110 jts of 2-3/8" hydrill tbg work string &amp; x-over &amp; 2-7/8" tbg thru the bottom lateral &amp; tag @ 8140'. Pull tbg tail to 7835' &amp; SI the well until AM of 6/21/10 when the lateral will get acidized.</p> <p>Csg Size: 3-1/2" 9.3# &amp; 5-1/2" 15.5#            Csg Depth: 8152' &amp; 7757'</p> <p>Load from yesterday: 400            Plus water today: 10            LLTR: 410 bbls</p> <p>Perfs:            Slotted 3-1/2 liner upper liner acidized only and production will be from that lateral until a later time.</p>
6/22/2010	06:00 - 16:00	10.00	STIM	1	<p>TIGHT HOLE - Resumption of report discontinued on 4/19/10: This work will be to complete the well in the lower lateral.</p> <p>On 6/21/10 SITP = 40# &amp; SICP = 160# w/ tbg tail @ 7835'. Bled off well. RIH w/ dual 2-3/8" hydril &amp; 2-7/8" workstring f/ 7835' to 8127'. MIRU Halliburton acid crew to acidize lower 3-1/2" cased horizontal lateral (5221-8152') using 15% HCL acid w/ additives &amp; spotting all acid to the bottom of the tbg prior to bullhading the acid as follows:            Zone #1: Tbg tail @ 8127'. Acidize w/ 6000 gals of acid &amp; flush w/ 30 bbls of 2% KCL water &amp; 10 bbls of brine. Avg psi = 2850#, ISIP = 460#. Pull tbg tail to 7724'.            Zone #2: With tbg tail @ 7724' acidize w/ 7000 gals of acid &amp; flush w/ 28 bbls of 2%</p>

## Operations Summary Report

Well Name: GH 9  
 Location: 20- 8-S 21-E 26  
 Rig Name: ROCKY MTN WS

Spud Date: 3/23/2010  
 Rig Release:  
 Rig Number: 3

Date	From - To	Hours	Code	Sub Code	Description of Operations
6/22/2010	06:00 - 16:00	10.00	STIM	1	<p>KCL water &amp; 10 bbls of brine. Avg psi = 3250#, ISIP = 550#. Pull tbg tail to 7353'.            Zone #3: With tbg tail @ 7353' acidize w/ 7000 gals of acid &amp; flush w/ 25 bbls of 2% KCL &amp; 10 bbls of brine. Avg psi = 2850#. Avg rate = 5.9 BPM; ISIP = 565#. Pull tbg tail @ 6668'.            Zone #4: With tbg tail @ 6668' acidize w/ 7000 gals of acid &amp; flush w/ 22 bbls of 2% KCL &amp; 10 bbls of brine. Avg psi = 3380#. Avg rate = 6.7 BPM. ISIP = 720#. Pull tbg tail to 6016'.            Zone #5: With tbg tail @ 6016' acidize w/ 8000 gals of acid &amp; flush w/ 18 bbls of 2% KCL water &amp; 10 bbls of brine. Avg psi = 3270#. Avg rate = 6.8 BPM. ISIP = 700#. RDMO Halliburton.            Pull tbg tail to 3340' to the 2-3/8" hydril tbg &amp; SIFN.</p> <p>24 Hour Forecast: Will POOH &amp; lay down the 2-3/8" hydril workstring &amp; RIH w/ production tbg.</p> <p>Csg Size: 3-1/2" 9.3# &amp; 5-1/2" 15.5#            Csg Depth: 8152' &amp; 7757'</p> <p>Load from yesterday: 400            Plus water today: 10            LLTR: 410 bbls</p> <p>Perfs:            Slotted 3-1/2 liner upper liner acidized only and production will be from that lateral until a later time.            Lateral #1 (lower) = 5421-8152'            Lateral #2 (upper): 5496-7757'</p>
6/23/2010	06:00 - 16:00	10.00	LOC	4	<p>TIGHT HOLE - Resumption of report discontinued on 4/19/10: This work will be to complete the well in the lower lateral.</p> <p>On 6/22/10 SITP = 40# &amp; SICP = 60#. Bled off gas. POOH while laying down 110 jts of 2-3/8" hydril tbg workstring. RIH w/ production tbg as follows: Barred NC; 1 jt; SN; 2" pup jt, 20'x2-1/4" pump barrel; 6' pup jt, B-2 AC; 150 jts of tbg. All tbg is 2-7/8" EUE 8RD J-55 6.5#. ND BOP's &amp; set AC w/ 11M# tension. NUWH. Pump 6 bbls of snake oil down the tbg &amp; drop the SV. RIH w/ 2-1/4"x5' plunger; 22x1-1/2" polish rod, 3'x1" rod, 35-3/4" guided rods; 52-3/4" plain rods; 51-7/8" plain rods; 47-1" plain rods; 8'x1"; 6'x1"; 2-2'x1" pony rods; a 26'x1-1/2" polish rod. Load tbg w/ 3 bbls of water &amp; long stroke to test tbg &amp; pump to 750# &amp; held OK. Hang off well &amp; turn well over to production department.</p> <p>24 Hr Forecast: Will RDMO Rocky Mtn WS.</p> <p>FINAL REPORT of this recompletion of the lower lateral.</p> <p>Csg Size: 3-1/2" 9.3# &amp; 5-1/2" 15.5#            Csg Depth: 8152' &amp; 7757'</p> <p>LLTR: 1420 bbls</p> <p>Perfs:            Slotted 3-1/2 liner upper liner acidized only and production will be from that lateral</p>

## Operations Summary Report

Well Name: GH 9  
 Location: 20- 8-S 21-E 26  
 Rig Name: ROCKY MTN WS

Spud Date: 3/23/2010  
 Rig Release:  
 Rig Number: 3

Date	From - To	Hours	Code	Sub Code	Description of Operations
6/23/2010	06:00 - 16:00	10.00	LOC	4	<p>until a later time.            Lateral #1 (lower) = 5421-8152'            Lateral #2 (upper): 5496-7757'</p> <p>Tbg Details of 6/22/10:            Barred NC = 0.44'            1 jt of tbg = 30.88'            SN = 0.77'            2' Pup = 2.29'            20' x 2-1/4" ID Pump = 20.17"            6' Pup = 6.18'            Nabors B-2 Anchor Catcher Set in 11M# tension = 2.77'            150 jts of tbg to surface = 4653.53'            Tension = 1.0'            KB = 14'            EOT @ 4732.03'            SN @ 4700.71'            AC @ 4671.30'            All tbg is 2-7/8" EUE 8RD 6.5# J-55.</p> <p>Rod &amp; Pump Detail as of 6/22/10            As above            Pump: Weatherford 2-1/4"x2-7/8"x20x22x28, Tbg Pump: #2508,            Max Stroke = 265"</p>