

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

FORM 3

AMENDED REPORT

<b>APPLICATION FOR PERMIT TO DRILL</b>		<b>1. WELL NAME and NUMBER</b> OP 16G-3-7-20
<b>2. TYPE OF WORK</b> DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>		<b>3. FIELD OR WILDCAT</b> UNDESIGNATED
<b>4. TYPE OF WELL</b> Oil Well Coalbed Methane Well: NO		<b>5. UNIT or COMMUNITIZATION AGREEMENT NAME</b> OURAY PARK
<b>6. NAME OF OPERATOR</b> QEP ENERGY COMPANY		<b>7. OPERATOR PHONE</b> 303 308-3068
<b>8. ADDRESS OF OPERATOR</b> 11002 East 17500 South, Vernal, Ut, 84078		<b>9. OPERATOR E-MAIL</b> debbie.stanberry@questar.com
<b>10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)</b> UTU-14639	<b>11. MINERAL OWNERSHIP</b> FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>	
<b>13. NAME OF SURFACE OWNER (if box 12 = 'fee')</b>		<b>12. SURFACE OWNERSHIP</b> FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>
<b>15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')</b>		<b>14. SURFACE OWNER PHONE (if box 12 = 'fee')</b>
<b>17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')</b>		<b>16. SURFACE OWNER E-MAIL (if box 12 = 'fee')</b>
<b>18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS</b> YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>		<b>19. SLANT</b> VERTICAL <input type="checkbox"/> DIRECTIONAL <input type="checkbox"/> HORIZONTAL <input checked="" type="checkbox"/>

20. LOCATION OF WELL	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
LOCATION AT SURFACE	788 FSL 863 FEL	SESE	3	7.0 S	20.0 E	S
Top of Uppermost Producing Zone	788 FSL 863 FEL	SESE	3	7.0 S	20.0 E	S
At Total Depth	788 FSL 863 FEL	SESE	3	7.0 S	20.0 E	S

<b>21. COUNTY</b> UINTAH	<b>22. DISTANCE TO NEAREST LEASE LINE (Feet)</b> 788	<b>23. NUMBER OF ACRES IN DRILLING UNIT</b> 763
<b>27. ELEVATION - GROUND LEVEL</b> 4865	<b>25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)</b> 0	<b>26. PROPOSED DEPTH</b> MD: 10436 TVD: 7377
	<b>28. BOND NUMBER</b> ESB000024	<b>29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE</b> A36125/ 49-2153

Hole, Casing, and Cement Information										
String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight
Surf	12.75	9.625	0 - 480	36.0	J-55 ST&C	0.0	Rockies Lite	170	1.18	13.5
I1	8.75	7	0 - 7600	26.0	N-80 LT&C	9.0	Halliburton Light , Type Unknown	430	3.194	11.0
							Halliburton Premium , Type Unknown	270	1.4	13.5

**ATTACHMENTS**

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

<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER	<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN
<input type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)	<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER
<input type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)	<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP

<b>NAME</b> Jan Nelson	<b>TITLE</b> Permit Agent	<b>PHONE</b> 435 781-4331
<b>SIGNATURE</b>	<b>DATE</b> 02/23/2011	<b>EMAIL</b> jan.nelson@questar.com

<b>API NUMBER ASSIGNED</b> 43047515030000	<b>APPROVAL</b>   Permit Manager
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LOCATION OF LATERAL NUMBER 1	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
Location At Kickoff Point Depth: 6931	788 FSL 863 FEL	SESE	3	7.0 S	20.0 E	S
Top of Uppermost Producing Zone	788 FSL 863 FEL	SESE	3	7.0 S	20.0 E	S
At Total Depth	1700 FNL 700 FWL	SWNW	2	7.0 S	20.0 E	S
COUNTY UINTAH		DISTANCE TO NEAREST LEASE LINE (Feet) 700				
DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 0		PROPOSED DEPTH MD: 10436 TVD: 7377				

**Hole, Casing, and Cement Information**

String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight
L1	6.125	4.5	0 - 10436	11.6	N-80 LT&C	10.0	None	0	0.0	0.0

LOCATION OF LATERAL NUMBER 2	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
Location At Kickoff Point Depth: 6831	788 FSL 863 FEL	SESE	3	7.0 S	20.0 E	S
Top of Uppermost Producing Zone	788 FSL 863 FEL	SESE	3	7.0 S	20.0 E	S
At Total Depth	2000 FSL 1000 FWL	NWSW	11	7.0 S	20.0 E	S
COUNTY UINTAH		DISTANCE TO NEAREST LEASE LINE (Feet) 1000				
DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 0		PROPOSED DEPTH MD: 11658 TVD: 7216				

**Hole, Casing, and Cement Information**

String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight
L2	6.125	4.5	0 - 11658	11.6	N-80 LT&C	10.0	None	0	0.0	0.0

# **QEP Energy**

## **OP 16G-3-7-20**

### **New Dual Horizontal Well**

#### **Summarized Procedure**

1. MIRU air rig.
2. Drill 12 ¼" surface hole to 480', run 9 5/8", 36#, J-55, STC, cement to surface.
3. RD air rig, move off location.
4. MIRU drilling rig.
5. NU rig's 3,000 WP rated BOP. Test BOP's and surface casing.
6. PU straight hole BHA, drill out surface casing and 10' of new formation, run FIT.
7. Drill 8 ¾" hole to ~7,600, Intermediate TD.
8. TOOH, LDDP.
9. Log hole.
10. PU and run 7", 26#, N-80 LTC casing to intermediate TD. Cement same.
11. RIH with a CIBP and set at 6,940' (est top of window/KOP at 6,931')
12. RIH, orient, and set 7" whipstock to 29°.
13. Mill Window. POOH.
14. PU directional BHA, TIH.
15. Build angle at a 29° azimuth with 14°/100' build rates to land in H4a formation at ~7,340' TVD and 7,568' MD.
16. Drill ~2,868' of lateral in H4a. TD at 10,436' MD / 7,377 TVD.
17. Mud system will be water based. Mud weights from 8.6 – 9.5 ppg, Max 10.0 ppg.
18. Circulate and condition hole, POOH.
19. PU 4 ½" 11.6#, N-80 liner, open hole packers, liner hanger, and TBR.
20. RIH with liner and hang liner at ~6,900' (in 7"). Set OH packers and liner hanger.
21. TOOH.
22. RU wireline, RIH and set RBP at 6,840' (est top of window/KOP at 6,831').
23. RIH, orient, and set 7" whipstock to 155°.
24. Mill window.
25. PU directional BHA, TIH, kick off and drill well at a 155° azimuth with 14°/100' build rates to land in H4a formation at ~7,323' TVD and ~7,568' MD.
26. Drill ~4,090' of lateral in the H4a. TD at 11,658' MD / 7,216 TVD.
27. Circulate and condition hole, TOOH.
28. PU 4 ½" 11.6#, N-80 liner, open hole packers, liner hanger, and TBR.
29. RIH with liner and hang liner at 6,835' (~5' outside of the window).
30. Set open hole packers and liner hanger.
31. POOH and LD DP.
32. Set BPV in wellhead. RDMOL

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:

Pilot Hole:

<u>Formation</u>	<u>Depth</u>
Green River	4,200'
X Marker	6,413'
G1 Lime	7,107'
H4a	7,335'
TD	7,600'

NE Lateral #1:

<u>Formation</u>	<u>Depth, TVD</u>	<u>Depth, MD</u>
Green River	4,200'	4,200'
Kick Off Point	6,931'	6,931'
H4a	7,340'	7,568'
TD	7,377'	10,436'

SE Lateral #2:

<u>Formation</u>	<u>Depth, TVD</u>	<u>Depth, MD</u>
Green River	4,200'	4,200'
Kick Off Point	6,831'	6,831'
H4a	7,323'	7,568'
TD	7,216'	11,658'

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:

Pilot Hole:

<u>Substance</u>	<u>Formation</u>	<u>Depth,</u>
Oil/Gas	H4a	7,340'

NE Lateral #1:

<u>Substance</u>	<u>Formation</u>	<u>Depth, TVD</u>	<u>Depth, MD</u>
Oil/Gas	H4a	7,340' – 7,377'	7,568' – 10,436'

SE Lateral #2:

<u>Substance</u>	<u>Formation</u>	<u>Depth, TVD</u>	<u>Depth, MD</u>
Oil/Gas	H4a	7,323' – 7,216'	7,568' – 11,658'

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.

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 Program**

Hole Size	Casing Size	Top, MD	Bottom, MD	Weight, lb/ft	Grade	Thread	Condition	MW
17 ½"	14"	sfc	40'	Steel	Cond.	None	Used	Air
12 ¼"	9 5/8"	sfc	480'	36.0	J-55	STC	New	Air
8 ¾"	7"	sfc	7,600'	26.0	N-80	LTC	New	8-9 ppg

Casing Strengths:				Collapse	Burst	Tensile (minimum)
9 5/8"	36.0 lb.	J-55	STC	2,020 psi	3,520 psi	394,000 lb.
7"	26.0 lb.	N-80	LTC	5,410 psi	7,240 psi	519,000 lb.

The Laterals will be lined with casing.

NE lateral #1:

Hole Size	Casing Size	Top,MD	Bottom, MD	Weight	Grade	MW
6 1/8"	4 ½"	6,900'	10,436'	11.6	N-80	8 – 10 ppg

SE lateral #2:

Hole Size	Casing Size	Top,MD	Bottom, MD	Weight	Grade	MW
6 1/8"	4 ½"	6,835'	11,658'	11.6	N-80	8 – 10 ppg

Casing Strengths:				Collapse	Burst	Tensile (minimum)
4 ½"	11.6 lb.	N-80	LTC	6,350 psi	7,780 psi	223,000 lb.

Please refer to the attached wellbore diagram procedure for further details.

**5. Cementing Program**

**20" Conductor:**

Cement to surface with construction cement.

**9-5/8" Surface Casing: sfc – 480' (MD)**

**Lead/Tail Slurry:** 0' – 480'. 170 sks (310 cu ft) Rockies LT cement + 0.25 lb/sk Kwik Seal + 0.125 lb/sk Poly-E-Flake. Slurry wt: 13.5 ppg, Slurry yield: 1.81 ft<sup>3</sup>/sk, Slurry volume: 12-1/4" hole + 100% excess.

**7" Intermediate Casing: sfc – 7,600' (MD)**

**Lead:** Sfc – 6,000' 430 sks (1350 cu ft) Halliburton Extendacem Cement + 3 pps Silicalite (Light Weight Additive) + 1% Econolite (Light Weight Additive) + 0.25 pps Poly-E-Flake (Lost Circulation Additive) + 1 pps Granulite TR ¼ (Lost Circulation Additive). Slurry Weight 11 lb/gal, Slurry Yield 3.194 ft<sup>3</sup>/sk, 50% Excess

**Tail Slurry:** 6,000' – 7,600'. 270 sks (370 cu ft) Bondcem Cement + 0.1% Fe-2 (Retarder) + 0.3% Halad (R)-344 (Fluid Loss Control) + 0.2% Versaset (Thixotropic Additive) + 0.2 % Super CBL Expander + 0.125 lb/sk Poly-E-Flake + 1.0 pps Granulite TR ¼ (Lost Circulation Additive). Slurry wt: 13.5 ppg, Slurry yield: 1.4 ft<sup>3</sup>/sk, 50% excess.

**NE Lateral #1: 6,900' – 10,436' (MD)**

No cement, liner hung in open hole.

**SE Lateral #2: 6,835' – 11,658' (MD)**

No cement, liner hung 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
- f. Request For Variance

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 480 feet and high pressures are not expected.

1. **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.
2. **Blooie line discharge 100 feet from wellbore 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.
3. **Automatic igniter or continuous pilot light on blooie line** – a diffuser will be used rather than an automatic pilot/igniter. Water is injected into the compressed air and eliminates the need for a pilot light and the need for dust suppression equipment.
4. **Compressors located in the opposite direction from the blooie line a minimum of 100 feet from the wellbore** – compressors located within 50 feet on the opposite side of the wellbore from the blooie line and is equipped with a 1) emergency kill switch on the driller's console, 2) pressure relief valves on the compressors, 3) spark arrestors on the motors.
5. **Kill Fluid to control well** – In lieu of having mud products on location to kill the well for an unanticipated kick, Questar will kill the well with water contained in a 400 bbl tank on site. The 400 bbl water tank will also be storage for surface casing cement water.
6. **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.
7. **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, a flare box will be installed and all flare lines will be routed to the flare box.

Drilling of the laterals will be done with fresh water NaCl based mud systems consisting primarily of fresh water, bentonite, lignite, caustic, lime, soda ash, polymers, and NaCl. 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 10.0 ppg.

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

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

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

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

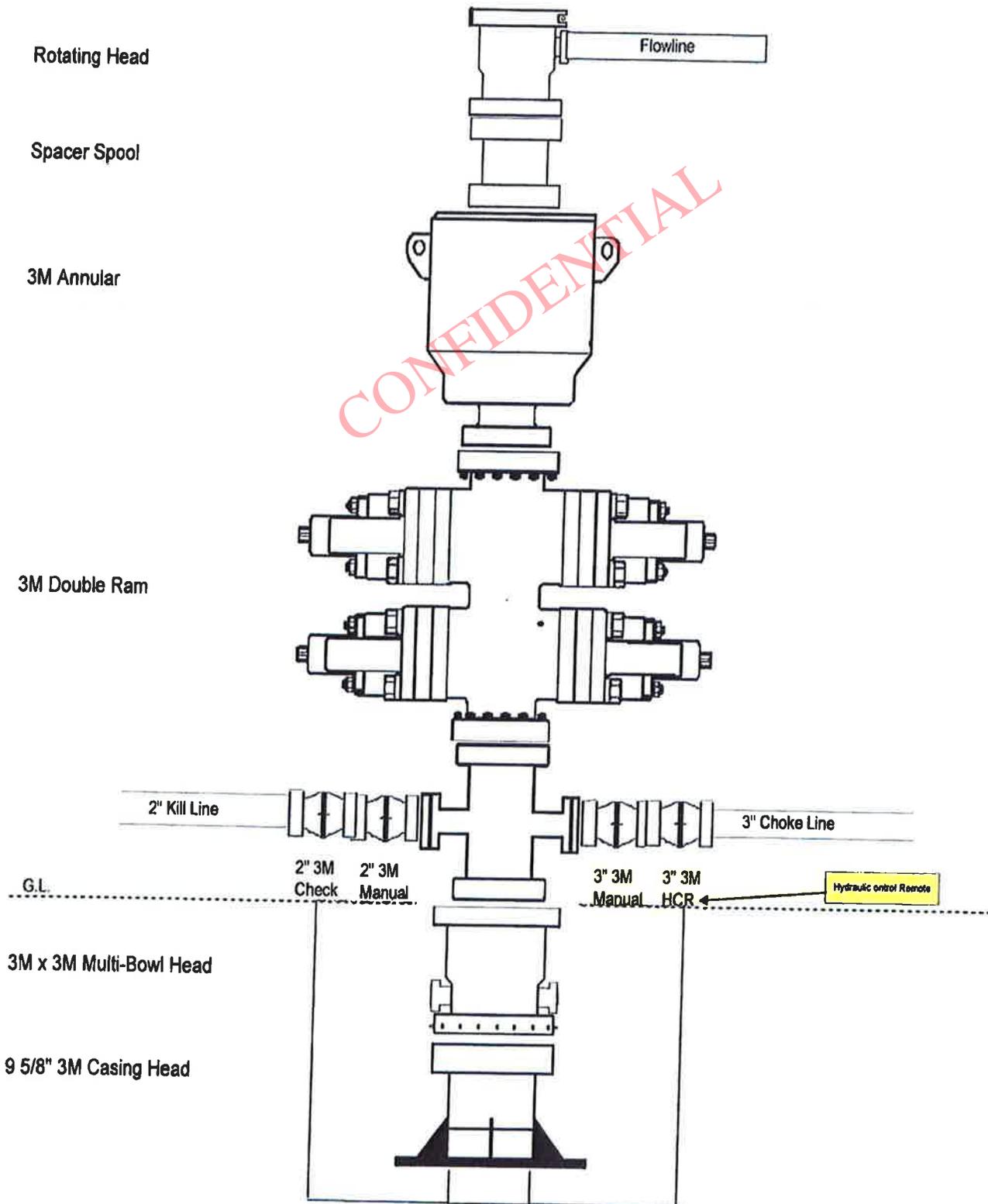
- a. Cores – None Anticipated
- b. DST – None Anticipated
- c. Logging:
  - i. Mud logging from casing exit to TD
  - ii. Open Hole Logs: Triple Combo in Pilot Hole (GR-SP-CAL-DN-PE)
  - iii. MWD-GR will be utilized in horizontal drilling operations to aid in landing the curve and maintaining the laterals within the desired zone.
- d. Formation and completion interval: H4a 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**

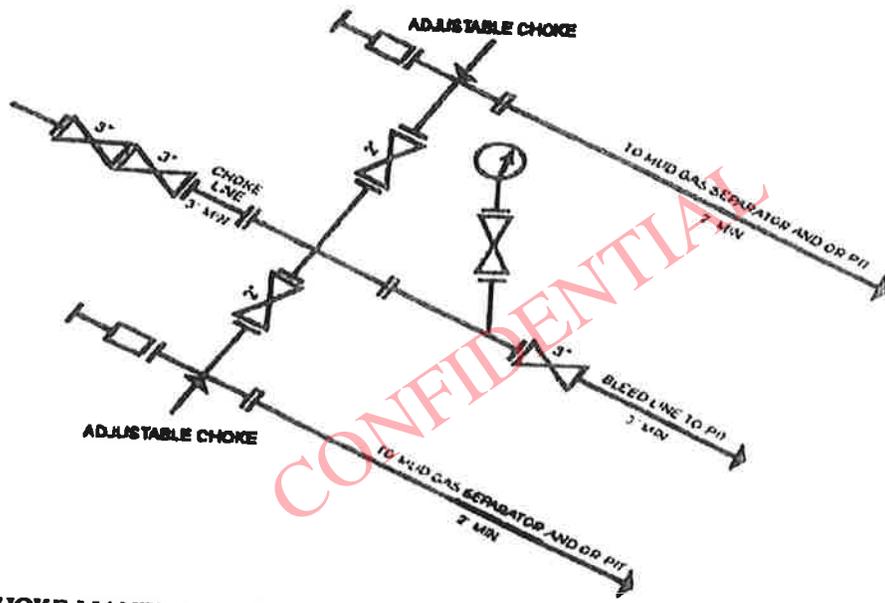
No abnormal temperatures or pressures are anticipated. No H<sub>2</sub>S has been encountered or is known to exist from previous wells drilled to similar depths in the general area. Maximum anticipated bottom-hole pressure equals approximately 3,952 psi. Maximum anticipated bottom hole temperature is approximately 150°F.

DRILLING PROGRAM

3M BOP STACK



ONSHORE OIL & GAS ORL NO. 1  
DRILLING PROGRAM



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

**OP 16G-3-7-20**

Updated 11-23-2010 MPG

API # 43-013-xxxxx

Proposed WBD

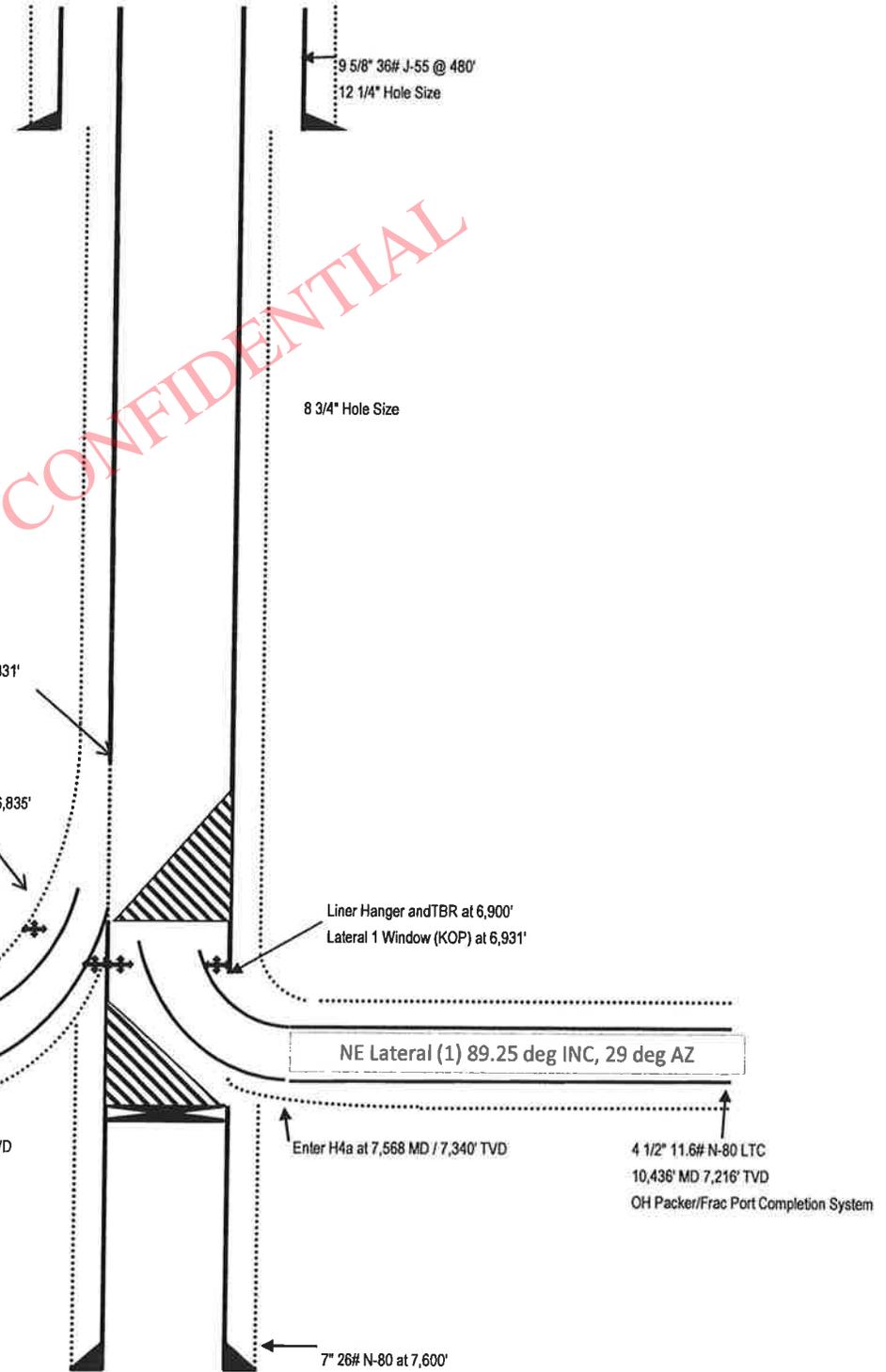
Uinta Basin

Section 3, T7S, R20E, Uintah County

KB 4,879'

GL 4,865'

NOTE: NOT TO SCALE





# OP 16G-3-7-20 Lateral 1 Plan 10-26-10 Permit Proposal

<b>Report Date:</b> October 28, 2010 <b>Client:</b> QEP ENERGY <b>Field:</b> Uinta <b>Structure / Slot:</b> Ouray Park / OP 16G-3-7-20 <b>Well:</b> OP 16G-3-7-20 <b>Borehole:</b> Lateral 1 <b>UWI/API#:</b> <b>Survey Name / Date:</b> OP 16G-3-7-20 Lateral 1 Plan 10-26-10 Permit / October 26, 2010 <b>Tort / AHD / DDI / ERD ratio:</b> 89.253° / 3271.46 ft / 5.616 / 0.443 <b>Grid Coordinate System:</b> NAD83 Utah State Planes, Central Zone, US Feet <b>Location Lat/Long:</b> N 40 14 5.990, W 109 38 57.650 <b>Location Grid N/E Y/X:</b> N 7259668.932 fUS, E 2157042.814 fUS <b>Grid Convergence Angle:</b> +1.18548856° <b>Grid Scale Factor:</b> 0.99992314	<b>Survey / DLS Computation Method:</b> Minimum Curvature / Lubinski <b>Vertical Section Azimuth:</b> 29.090° <b>Vertical Section Origin:</b> N 0.000 ft, E 0.000 ft <b>TVD Reference Datum:</b> KB <b>TVD Reference Elevation:</b> 4877.1 ft relative to MSL <b>Sea Bed / Ground Level Elevation:</b> 4921.900 ft relative to MSL <b>Magnetic Declination:</b> 11.254° <b>Total Field Strength:</b> 52499.880 nT <b>Magnetic Dip:</b> 66.048° <b>Declination Date:</b> October 26, 2010 <b>Magnetic Declination Model:</b> IGRF 2010 <b>North Reference:</b> True North <b>Total Corr Mag North -&gt; True North:</b> +11.254° <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 (fUS)	Easting (fUS)
Tie-In	0.00	0.00	29.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.09M	7259668.93	2157042.81
7" Casing Point	6930.00	0.00	29.09	6930.00	0.00	0.00	0.00	0.00	0.00	0.00	29.09M	7259668.93	2157042.81
KOP-Build 14.00/100ft	6931.00	0.00	29.09	6931.00	0.00	0.00	0.00	0.00	0.00	0.00	29.09M	7259668.93	2157042.81
End Build, Hold	7568.50	89.25	29.09	7340.22	403.90	352.95	196.37	403.90	29.09	14.00	-144.43G	7260025.84	2157231.82
PBHL/TD	10436.31	89.25	29.09	7377.82	3271.46	2858.81	1590.49	3271.46	29.09	0.00	0.00G	7262559.81	2158573.70

**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)	EQU Freq	Survey Tool Type
-44.80	0.00	1/100.00	SLB_MWD-STD
0.00	10436.31	1/100.00	SLB_MWD-STD

**Borehole -> Survey**

Lateral 1 -> OP 16G-3-7-20 Lateral 1 Plan 10-26-10 Permit  
 Lateral 1 -> OP 16G-3-7-20 Lateral 1 Plan 10-26-10 Permit



# OP 16G-3-7-20 Lateral 2 Plan 10-26-10 Permit Proposal

<b>Report Date:</b> October 28, 2010 <b>Client:</b> QEP ENERGY <b>Field:</b> Uinta <b>Structure / Slot:</b> Ouray Park / OP 16G-3-7-20 <b>Well:</b> OP 16G-3-7-20 <b>Borehole:</b> Lateral 2 <b>UWI/API#:</b> <b>Survey Name / Date:</b> OP 16G-3-7-20 Lateral 2 Plan 10-26-10 Permit / October 26, 2010 <b>Tort / AHD / DDI / ERD ratio:</b> 91.505° / 4515.60 ft / 5.818 / 0.617 <b>Grid Coordinate System:</b> NAD83 Utah State Planes, Central Zone, US Feet <b>Location Lat/Long:</b> N 40 14 5.990, W 109 38 57.650 <b>Location Grid N/E Y/X:</b> N 7259668.932 ftUS, E 2157042.814 ftUS <b>Grid Convergence Angle:</b> +1.18548856° <b>Grid Scale Factor:</b> 0.99992314	<b>Survey / DLS Computation Method:</b> Minimum Curvature / Lubinski <b>Vertical Section Azimuth:</b> 155.330° <b>Vertical Section Origin:</b> N 0.000 ft, E 0.000 ft <b>TVD Reference Datum:</b> KB <b>TVD Reference Elevation:</b> 4877.1 ft relative to MSL <b>Sea Bed / Ground Level Elevation:</b> 4921.900 ft relative to MSL <b>Magnetic Declination:</b> 11.254° <b>Total Field Strength:</b> 52499.880 nT <b>Magnetic Dip:</b> 66.048° <b>Declination Date:</b> October 26, 2010 <b>Magnetic Declination Model:</b> IGRF 2010 <b>North Reference:</b> True North <b>Total Corr Mag North -&gt; True North:</b> +11.254° <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)	Easting (ftUS)
Tie-In	0.00	0.00	155.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	155.33M	7259668.93	2157042.81
KOP-Build 8.00/100ft	6831.00	0.00	155.33	6831.00	0.00	0.00	0.00	0.00	0.00	0.00	155.33M	7259668.93	2157042.81
End Build, Hold	6906.00	6.00	155.33	6905.86	3.92	-3.57	1.64	3.92	155.33	8.00	0.00G	7259665.40	2157044.52
KOP-Build 14.00/100ft	6958.00	6.00	155.33	6957.58	9.36	-8.50	3.91	9.36	155.33	0.00	0.00G	7259660.51	2157046.90
End Build, Hold	7568.71	91.50	155.33	7323.91	427.09	-388.10	178.26	427.09	155.33	14.00	-56.07G	7259284.63	2157229.05
PBHL/TD	11658.63	91.50	155.33	7216.75	4515.60	-4103.38	1884.91	4515.60	155.33	0.00	0.00G	7255605.75	2159012.06

**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)	EQU Freq	Survey Tool Type
-44.80	0.00	1/100.00	SLB_MWD-STD
0.00	11658.63	1/100.00	SLB_MWD-STD

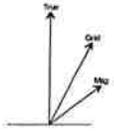
**Borehole -> Survey**

Lateral 2 -> OP 16G-3-7-20 Lateral 2 Plan 10-26-10 Permit  
 Lateral 2 -> OP 16G-3-7-20 Lateral 2 Plan 10-26-10 Permit

WELL <b>OP 16G-3-7-20</b>	FIELD <b>Uinta</b>	STRUCTURE <b>Ouray Park</b>
Magnetic Parameters Model: IGRF 2010 Dip: 66.048° Mag Dec: +11.254°	Date: October 26, 2010 FS: 52499.9 nT	Surface Location Lat: N40 14 5.990 Lon: W109 38 57.650
NADE3 Utah State Planes, Central Zone, US Feet Northing: 725966.83 RUS Easting: 2157042.81 RUS Grid Conv: +1.18548856° Scale Fact: 0.9999231422	Miscellaneous Slot: OP 16G-3-7-20 Plan: OP 16G-3-7-20 Lateral 1 Plan 10-26-10 Permit	TVD Ref: KB (4877.10 ft above MSL) October 26, 2010

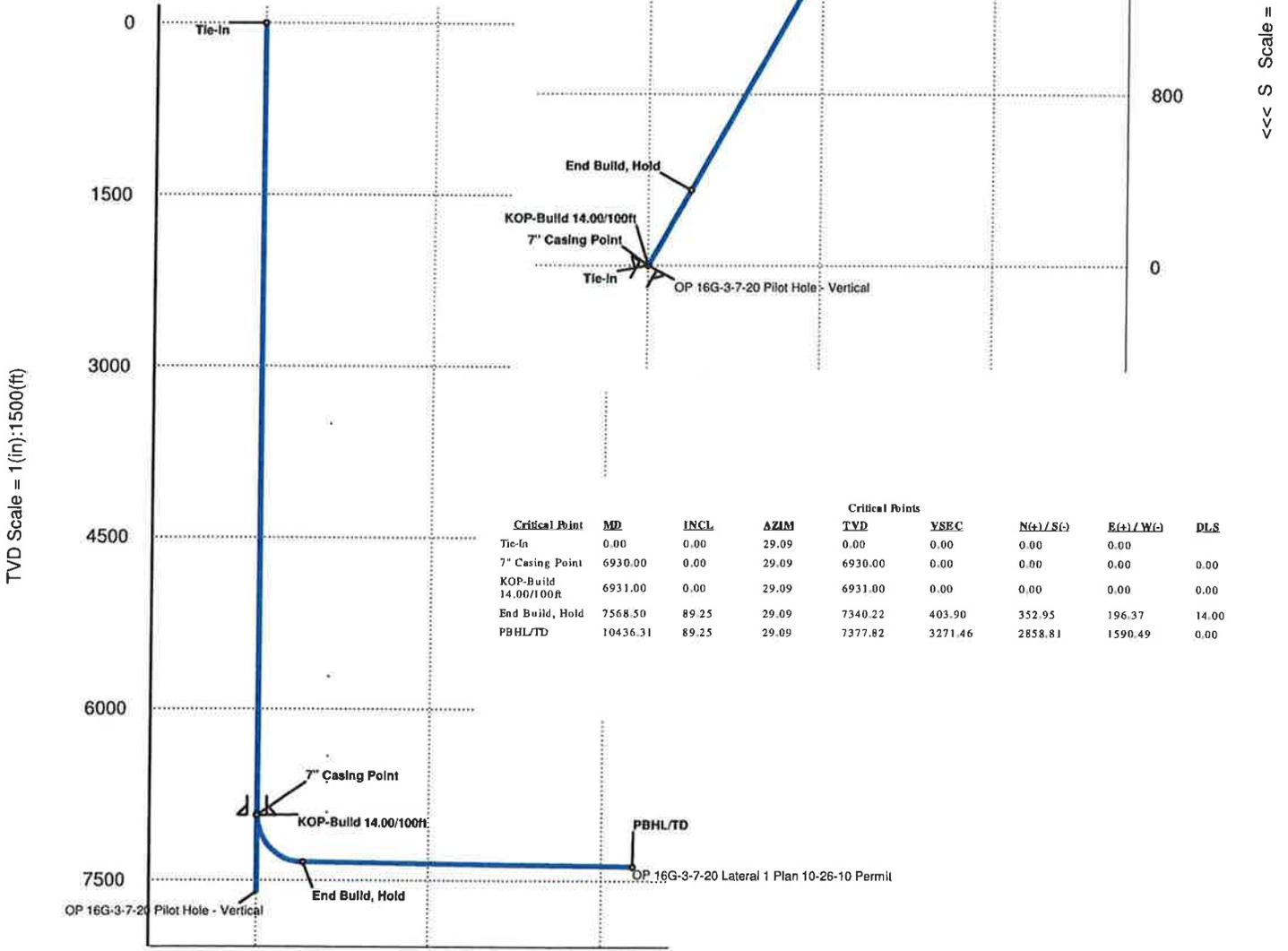


<<< W Scale = 1(in):800(ft) E >>>  
0 800 1600



True North  
Tot Corr (M->T +11.2540°)  
Mag Dec (+11.254°)  
Grid Conv (+1.18548856°)

CONFIDENTIAL



<<< S Scale = 1(in):800(ft) N >>>

TVD Scale = 1 (in):1500(ft)

Critical Point	MD	INCL	AZIM	TVD	YSEC	N(+)/S(-)	E(+)/W(-)	DLS
Tie-In	0.00	0.00	29.09	0.00	0.00	0.00	0.00	0.00
7" Casing Point	6930.00	0.00	29.09	6930.00	0.00	0.00	0.00	0.00
KOP-Build 14.00/100ft	6931.00	0.00	29.09	6931.00	0.00	0.00	0.00	0.00
End Build, Hold	7568.50	89.25	29.09	7340.22	403.90	352.95	196.37	14.00
PBHL/TD	10436.31	89.25	29.09	7377.82	3271.46	2858.81	1590.49	0.00

Vertical Section (ft) Azim = 29.09°, Scale = 1(in):1500(ft) Origin = 0 N/-S, 0 E/-W

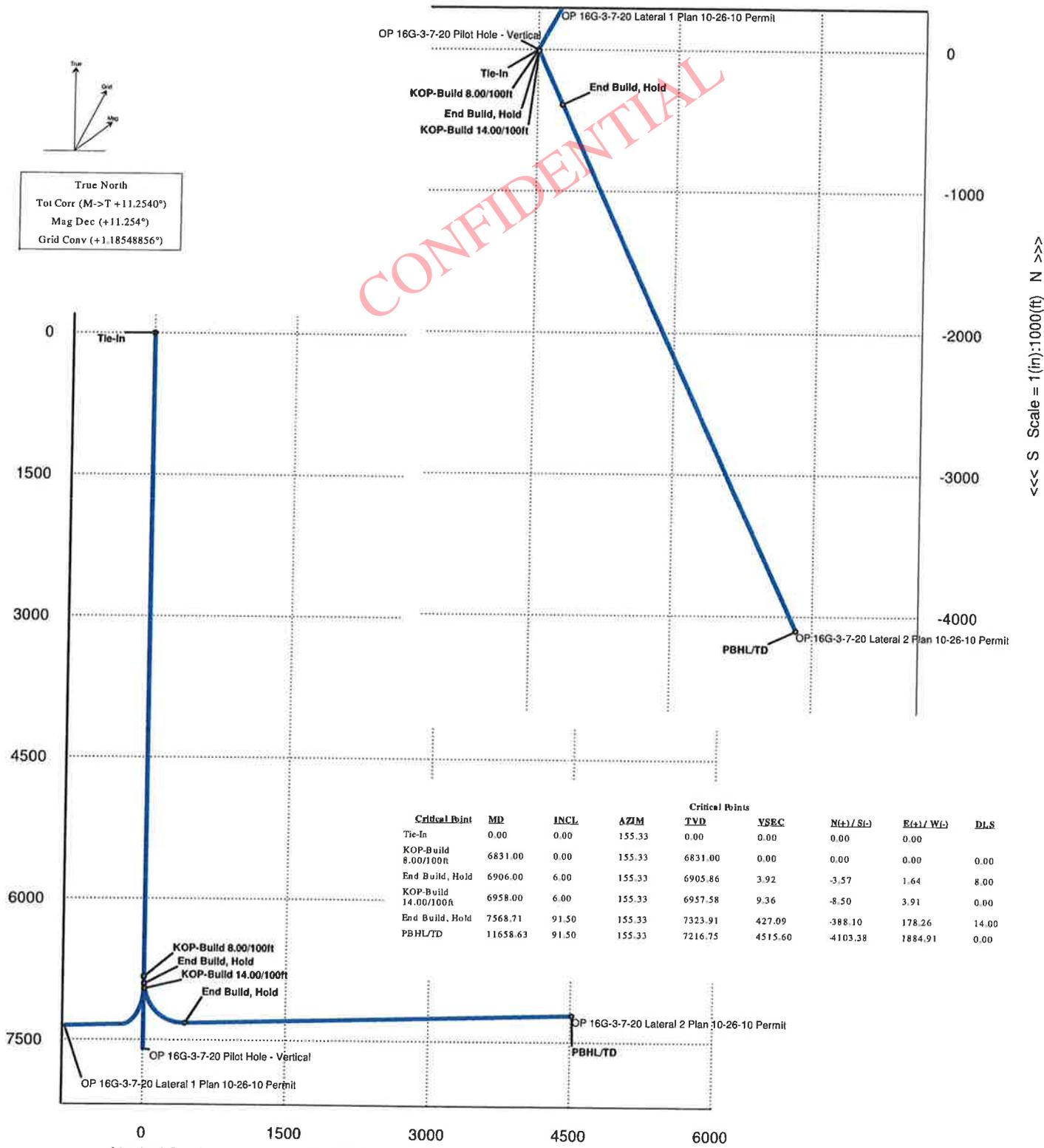
WELL: <b>OP 16G-3-7-20</b>	FIELD: <b>Uinta</b>	STRUCTURE: <b>Ourray Park</b>
Magnetic Parameters Model: IGRF 2010 Dip: 66.048° Mag Dec: +11.254°	Date: October 26, 2010 FS: 52499.9 nT	Surface Location Lat: N40 14 5.990 Lon: W109 38 57.650
NAD83 Utah State Planes, Central Zone, US Feet Northing: 7299658.93 MUS Easting: 2157042.81 MUS	Grid Conv: +1.18548856° Scale Fact: 0.9999231422	Miscellaneous Slot: OP 16G-3-7-20 Plan: OP 16G-3-7-20 Lateral 2 Plan 10-26-10 Permit



<<< W Scale = 1(in):1000(ft) E >>>  
0 1000 2000

CONFIDENTIAL

True North  
Tot Corr (M->T +11.2540°)  
Mag Dec (+11.254°)  
Grid Conv (+1.18548856°)



Critical Point	MD	INCL	AZIM	TVD	YSEC	N(+)/S(-)	E(+)/W(-)	DLS
Tie-In	0.00	0.00	155.33	0.00	0.00	0.00	0.00	
KOP-Build 8.00/100ft	6831.00	0.00	155.33	6831.00	0.00	0.00	0.00	0.00
End Build, Hold	6906.00	6.00	155.33	6905.86	3.92	-3.57	1.64	8.00
KOP-Build 14.00/100ft	6958.00	6.00	155.33	6957.58	9.36	-8.50	3.91	0.00
End Build, Hold	7568.71	91.50	155.33	7323.91	427.09	-388.10	178.26	14.00
PBHL/TD	11658.63	91.50	155.33	7216.75	4515.60	-4103.38	1884.91	0.00

Vertical Section (ft) Azim = 155.33°, Scale = 1(in):1500(ft) Origin = 0 N/-S, 0 E/-W

# T7S, R20E, S.L.B.&M.

## QEP ENERGY COMPANY

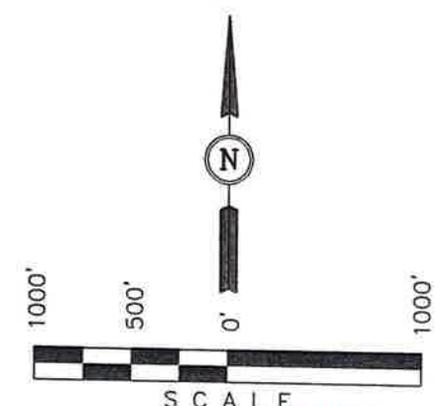
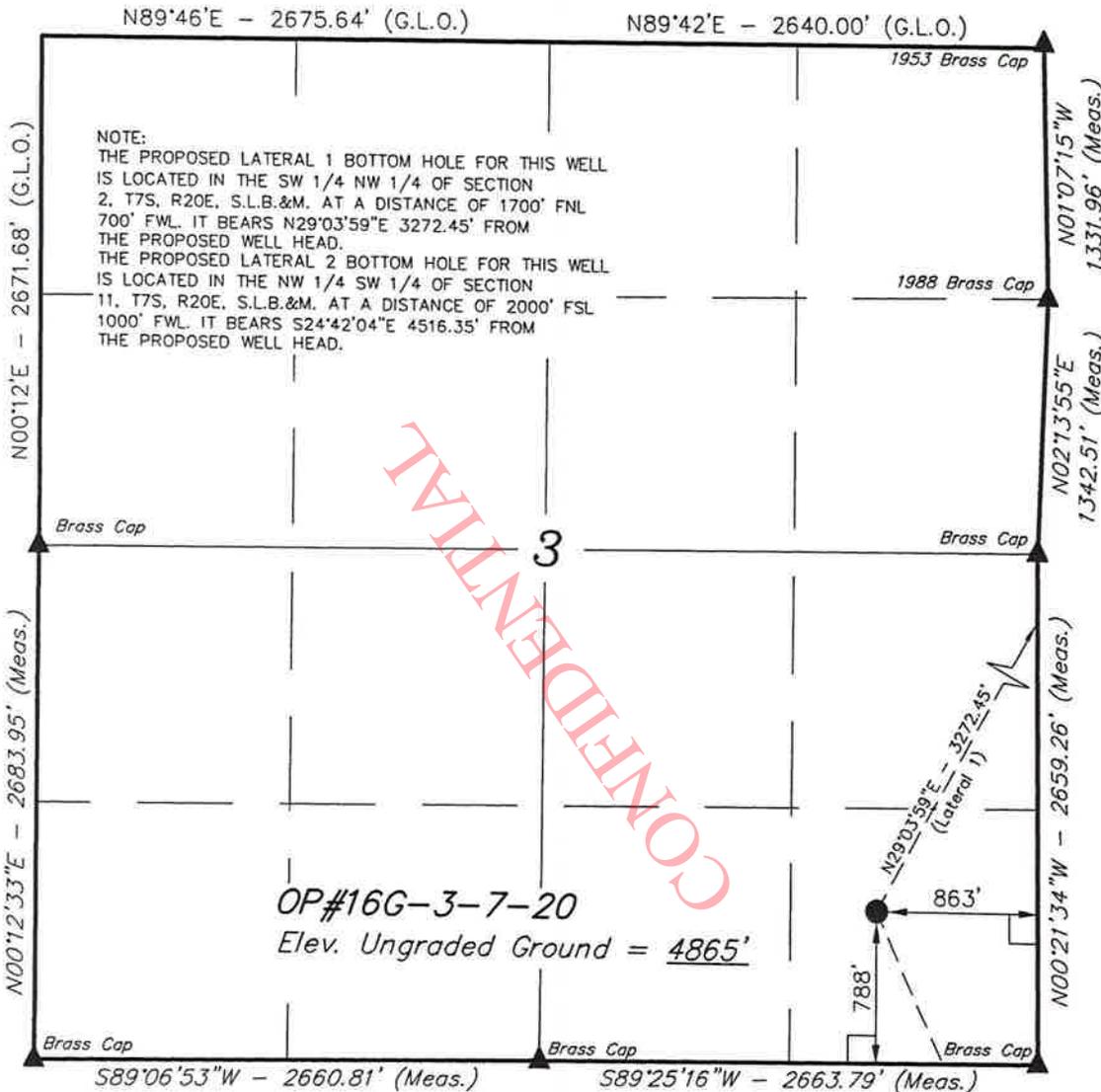
Well location, OP#16G-3-7-20, (SURFACE LOCATION) located as shown in the SE 1/4 SE 1/4 of Section 3, T7S, R20E, S.L.B.&M., Uintah County, Utah.

### BASIS OF ELEVATION

BENCH MARK (38EAM) LOCATED IN THE SW 1/4 OF SECTION 9, T7S, R20E, S.L.B.&M. TAKEN FROM THE PELICAN LAKE, QUADRANGLE, UTAH, UTAH COUNTY, 7.5 MINUTE QUAD (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 4942 FEET.

### BASIS OF BEARINGS

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



### 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.

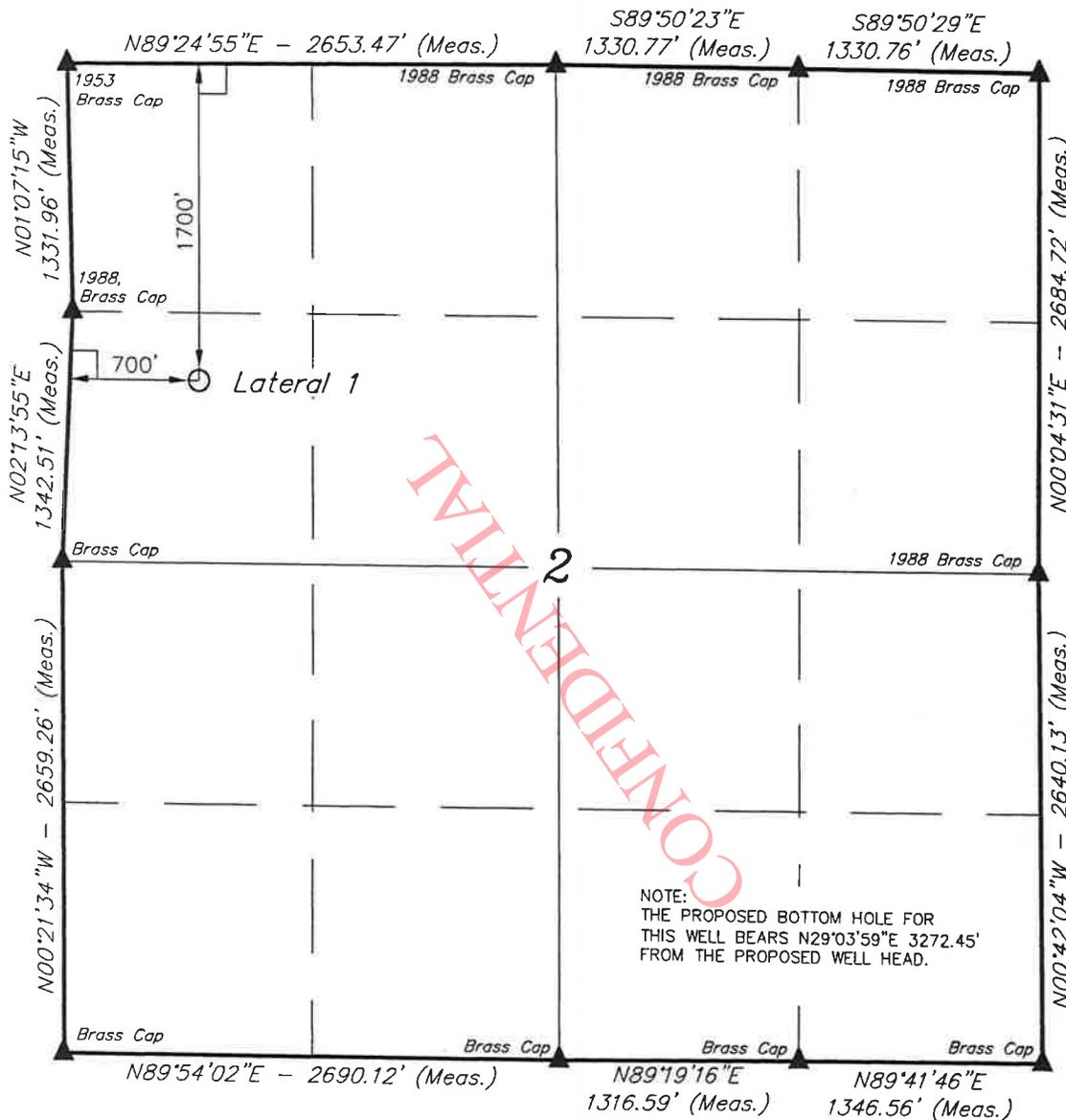
*Robert L. Kay*  
 REGISTERED LAND SURVEYOR  
 REGISTRATION NO. 181319  
 STATE OF UTAH

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

(AUTONOMOUS NAD 83)  
 LATITUDE = 40°14'05.99" (40.234997)  
 LONGITUDE = 109°38'57.65" (109.649347)  
 (AUTONOMOUS NAD 27)  
 LATITUDE = 40°14'06.13" (40.235036)  
 LONGITUDE = 109°38'55.15" (109.648653)

<b>UINTAH ENGINEERING &amp; LAND SURVEYING</b>		
85 SOUTH 200 EAST - VERNAL, UTAH 84078		
(435) 789-1017		
SCALE 1" = 1000'	DATE SURVEYED: 08-16-10	DATE DRAWN: 08-25-10
PARTY B.B. B.H. J.I.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE QEP ENERGY COMPANY	

# T7S, R20E, S.L.B.&M.



NOTE:  
THE PROPOSED BOTTOM HOLE FOR  
THIS WELL BEARS N29°03'59"E 3272.45'  
FROM THE PROPOSED WELL HEAD.

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

(AUTONOMOUS NAD 83)  
 LATITUDE = 40°14'34.24" (40.242844)  
 LONGITUDE = 109°38'37.14" (109.643650)  
 (AUTONOMOUS NAD 27)  
 LATITUDE = 40°14'34.38" (40.242883)  
 LONGITUDE = 109°38'34.64" (109.642944)

## QEP ENERGY COMPANY

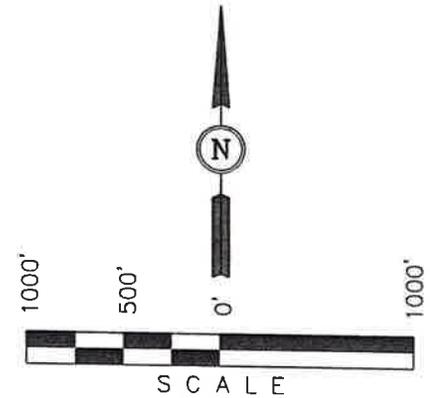
Well location, OP#16G-3-7-20, (TARGET BOTTOM HOLE LOCATION), located as shown in the SW 1/4 NW 1/4 of Section 2, T7S, R20E, S.L.B.&M., Uintah County, Utah.

### BASIS OF ELEVATION

BENCH MARK (38EAM) LOCATED IN THE SW 1/4 OF SECTION 9, T7S, R20E, S.L.B.&M. TAKEN FROM THE PELICAN LAKE, 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 4942 FEET.

### BASIS OF BEARINGS

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



### 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.

*Robert L. Kay*  
 REGISTERED LAND SURVEYOR  
 REGISTRATION NO. 161319  
 STATE OF UTAH

**UINTAH ENGINEERING & LAND SURVEYING**  
 85 SOUTH 200 EAST - VERNAL, UTAH 84078  
 (435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 08-16-10	DATE DRAWN: 08-25-10
PARTY B.B. B.H. J.I.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE QEP ENERGY COMPANY	

# T7S, R20E, S.L.B.&M.

## QEP ENERGY COMPANY

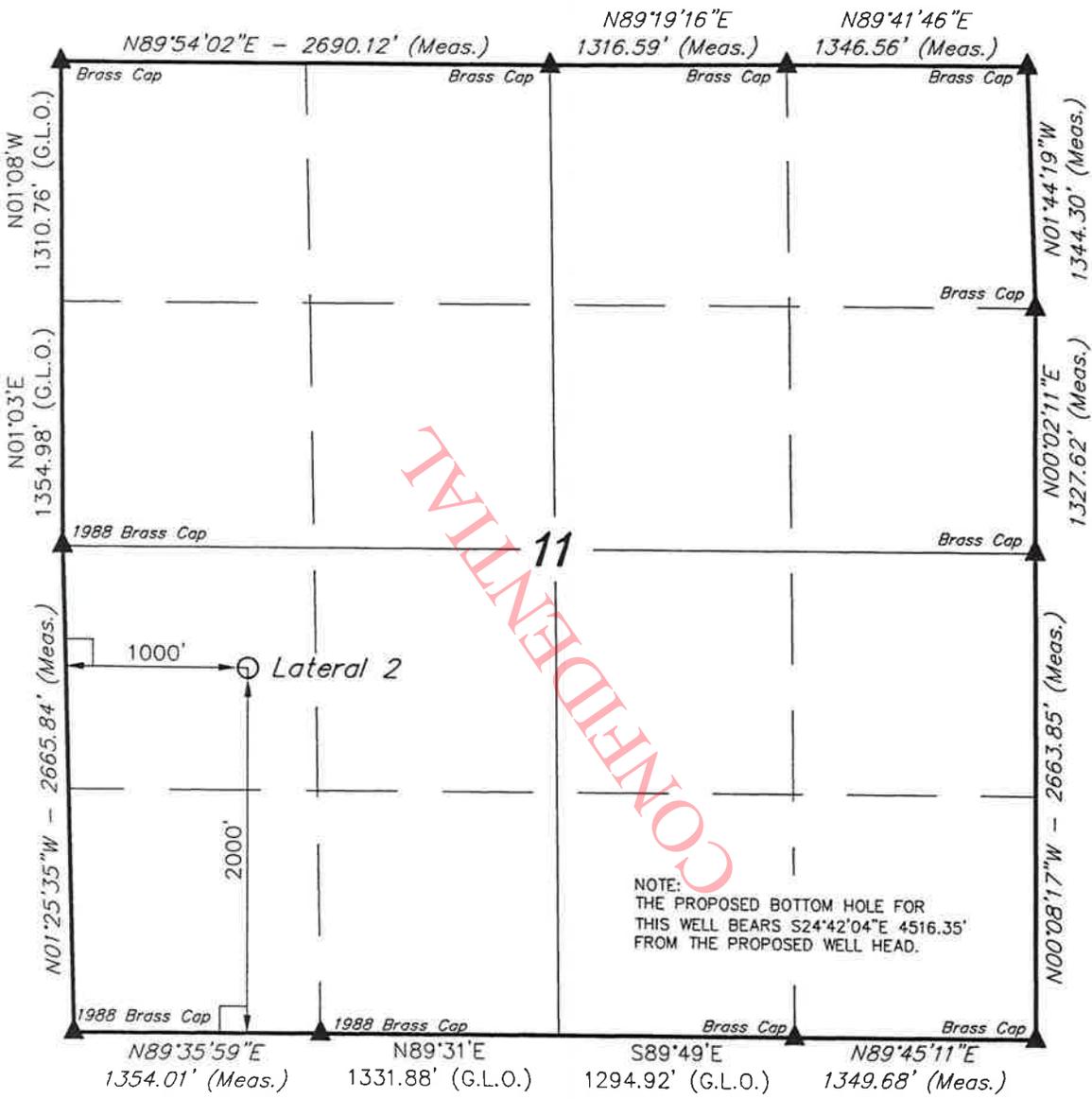
Well location, OP#16G-3-7-20, (TARGET BOTTOM HOLE LOCATION), located as shown in the NW 1/4 SW 1/4 of Section 11, T7S, R20E, S.L.B.&M., Uintah County, Utah.

### BASIS OF ELEVATION

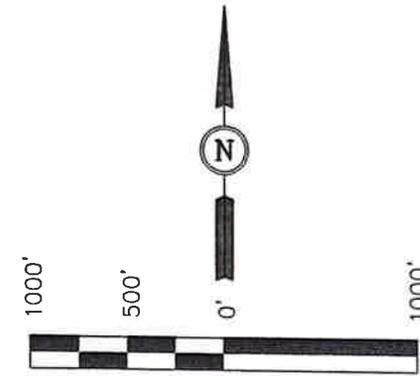
BENCH MARK (38EAM) LOCATED IN THE SW 1/4 OF SECTION 9, T7S, R20E, S.L.B.&M. TAKEN FROM THE PELICAN LAKE, QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 4942 FEET.

### BASIS OF BEARINGS

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



NOTE:  
THE PROPOSED BOTTOM HOLE FOR  
THIS WELL BEARS S24°42'04"E 4516.35'  
FROM THE PROPOSED WELL HEAD.



### 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.

*Paul S. King*  
REGISTERED LAND SURVEYOR  
REGISTRATION NO. 161319  
STATE OF UTAH

### UINTAH ENGINEERING & LAND SURVEYING

85 SOUTH 200 EAST - VERNAL, UTAH 84078

(435) 789-1017

### LEGEND:

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

(AUTONOMOUS NAD 83)

LATITUDE = 40°13'25.44" (40.223733)  
LONGITUDE = 109°38'33.35" (109.642597)

(AUTONOMOUS NAD 27)

LATITUDE = 40°13'25.58" (40.223772)  
LONGITUDE = 109°38'30.85" (109.641903)

SCALE 1" = 1000'	DATE SURVEYED: 08-16-10	DATE DRAWN: 08-25-10
PARTY B.B. B.H. J.I.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE QEP ENERGY COMPANY	

# QEP ENERGY COMPANY

OP #16G-3-7-20

LOCATED IN UINTAH COUNTY, UTAH  
SECTION 3, T7S, R20E, S.L.B.&M.

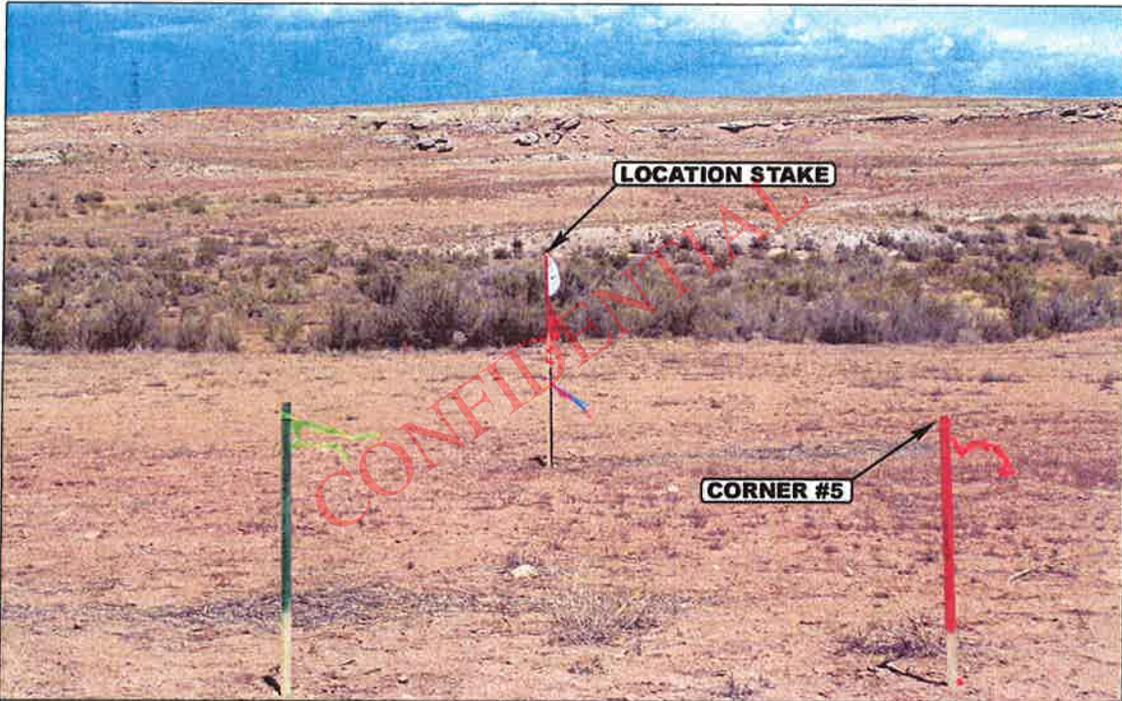


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHEASTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: SOUTHWESTERLY



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85 South 200 East Vernal, Utah 84078  
435-789-1017 uels@uelsinc.com

LOCATION PHOTOS

08 27 10  
MONTH DAY YEAR

PHOTO

TAKEN BY: B.B.

DRAWN BY: J.L.G.

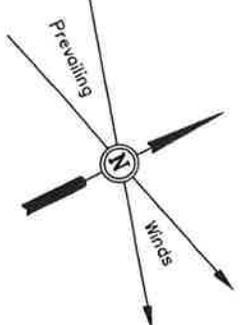
REVISED: 00-00-00

# QEP ENERGY COMPANY

## LOCATION LAYOUT FOR

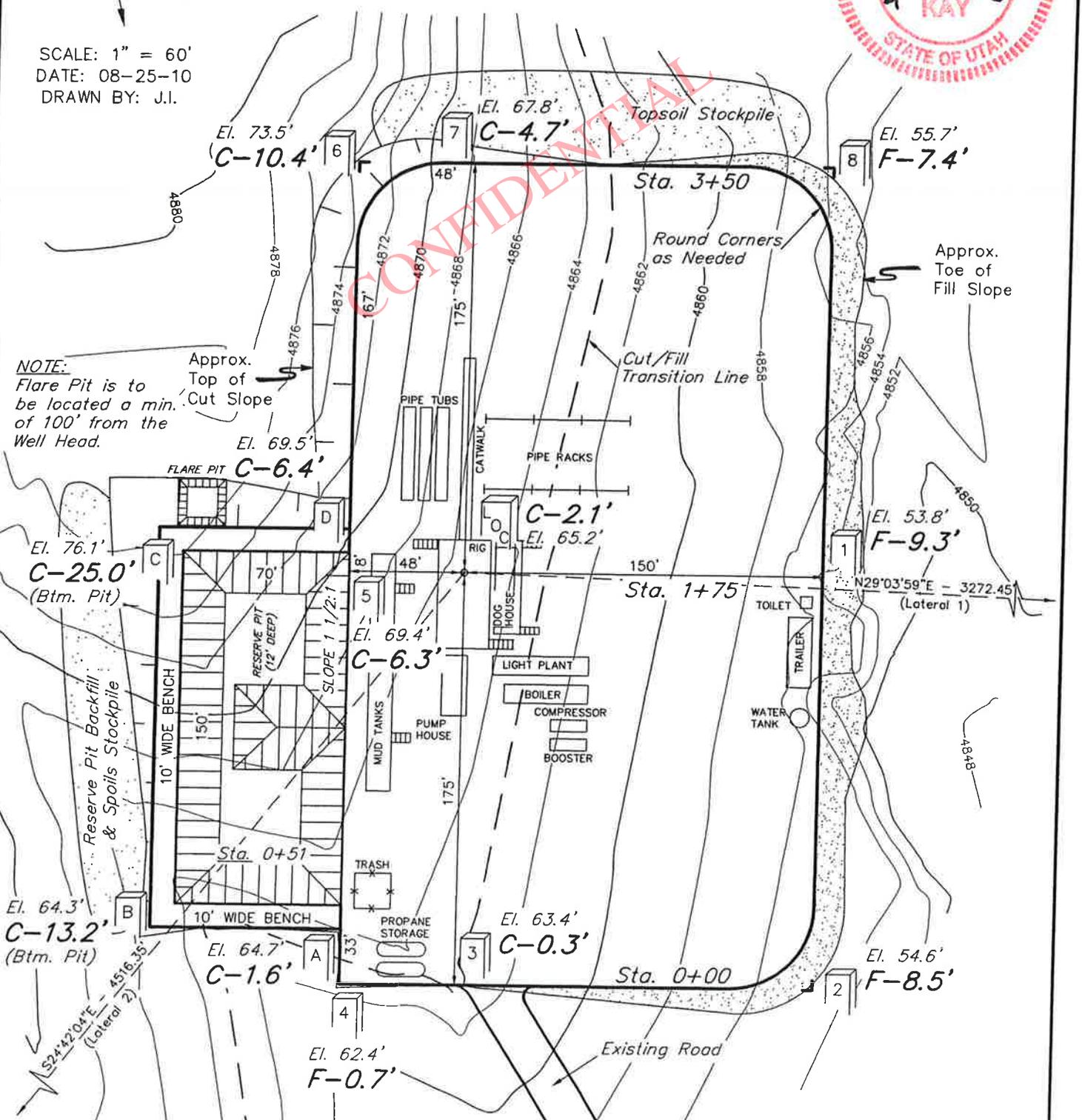
OP #16G-3-7-20  
SECTION 3, T7S, R20E, S.L.B.&M.  
788' FSL 863' FEL

FIGURE #1



SCALE: 1" = 60'  
DATE: 08-25-10  
DRAWN BY: J.I.

**CONFIDENTIAL**



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

El. 76.1'  
**C-25.0'**  
(Btm. Pit)

El. 64.3'  
**C-13.2'**  
(Btm. Pit)

El. 73.5'  
**C-10.4'**

El. 67.8'  
**C-4.7'**

El. 69.5'  
**C-6.4'**  
FLARE PIT

El. 69.4'  
**C-6.3'**

El. 65.2'  
**C-2.1'**

El. 63.4'  
**C-0.3'**

El. 64.7'  
**C-1.6'**

El. 62.4'  
**F-0.7'**

El. 55.7'  
**F-7.4'**

El. 53.8'  
**F-9.3'**

El. 54.6'  
**F-8.5'**

Elev. Ungraded Ground At Loc. Stake = 4865.2'  
FINISHED GRADE ELEV. AT LOC. STAKE = 4863.1'

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**QEP ENERGY COMPANY**

**TYPICAL CROSS SECTION FOR**

OP #16G-3-7-20

SECTION 3, T7S, R20E, S.L.B.&M.

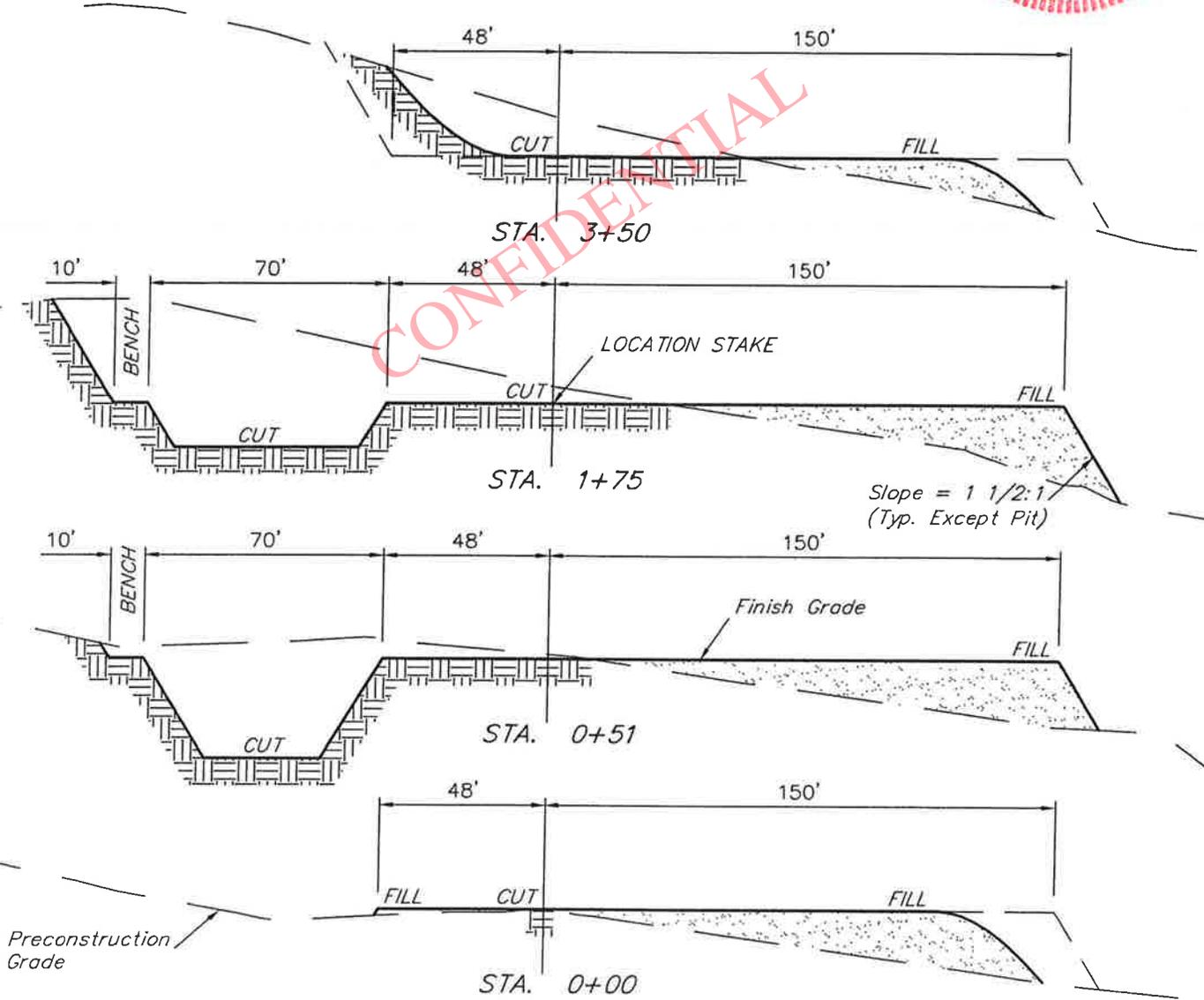
788' FSL 863' FEL

**FIGURE #2**



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

DATE: 08-25-10  
DRAWN BY: J.I.



CONFIDENTIAL

**NOTE:**

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

APPROXIMATE ACREAGES  
WELL SITE DISTURBANCE = ± 2.442 ACRES  
TOTAL = ± 2.442 ACRES

\* NOTE:  
FILL QUANTITY INCLUDES 5% FOR COMPACTION

APPROXIMATE YARDAGES

<b>CUT</b>	
(6") Topsoil Stripping	= 1,840 Cu. Yds.
Remaining Location	= 9,090 Cu. Yds.
<b>TOTAL CUT</b>	<b>= 10,930 CU.YDS.</b>
<b>FILL</b>	<b>= 7,660 CU.YDS.</b>

EXCESS MATERIAL	= 3,270 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	= 3,270 Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation)	= 0 Cu. Yds.

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**QEP ENERGY COMPANY**  
**PRODUCTION FACILITY LAYOUT FOR**  
**OP #16G-3-7-20**  
**SECTION 3, T7S, R20E, S.L.B.&M.**  
**788' FSL 863' FEL**

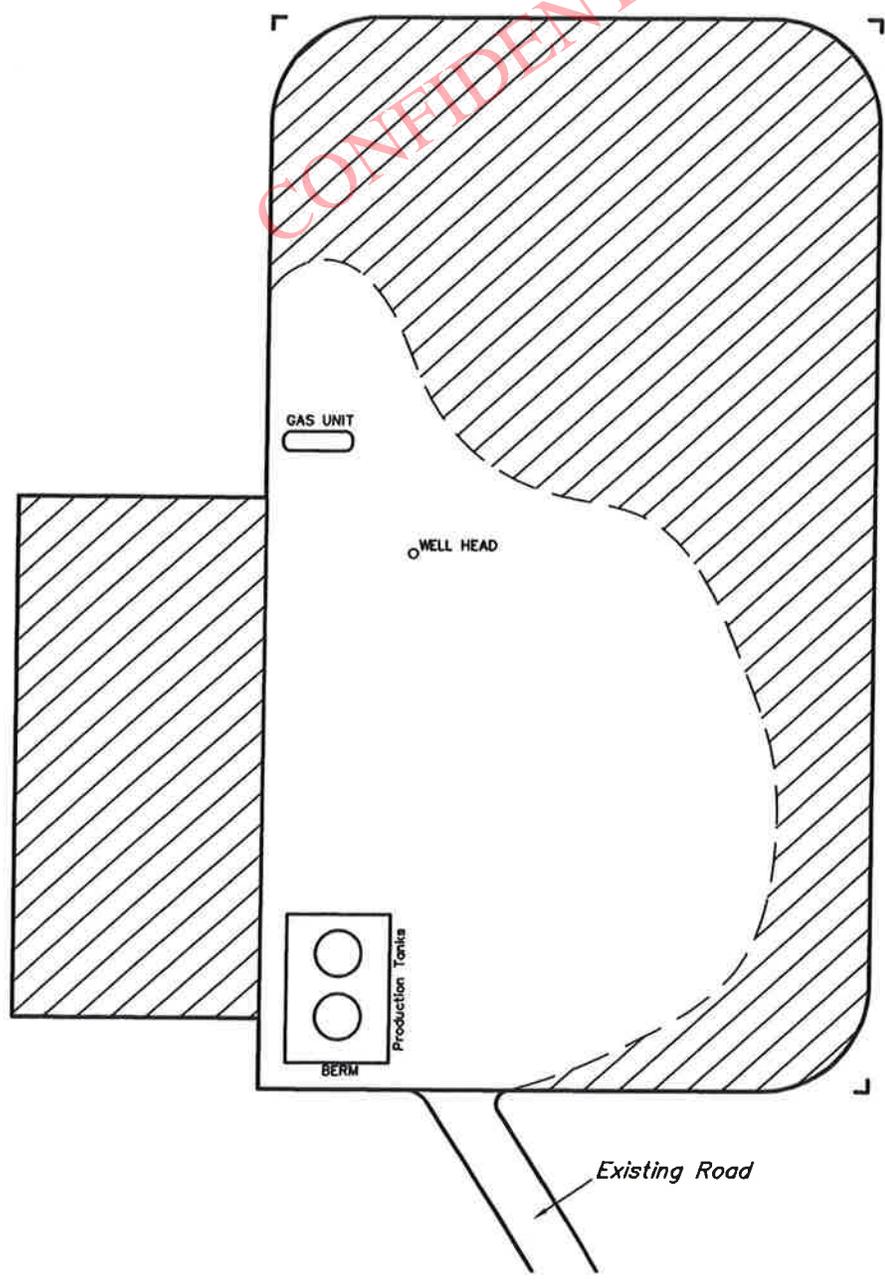
**FIGURE #3**



SCALE: 1" = 60'  
DATE: 08-25-10  
DRAWN BY: J.I.  
REV: 10-27-10 Z.L.



**CONFIDENTIAL**



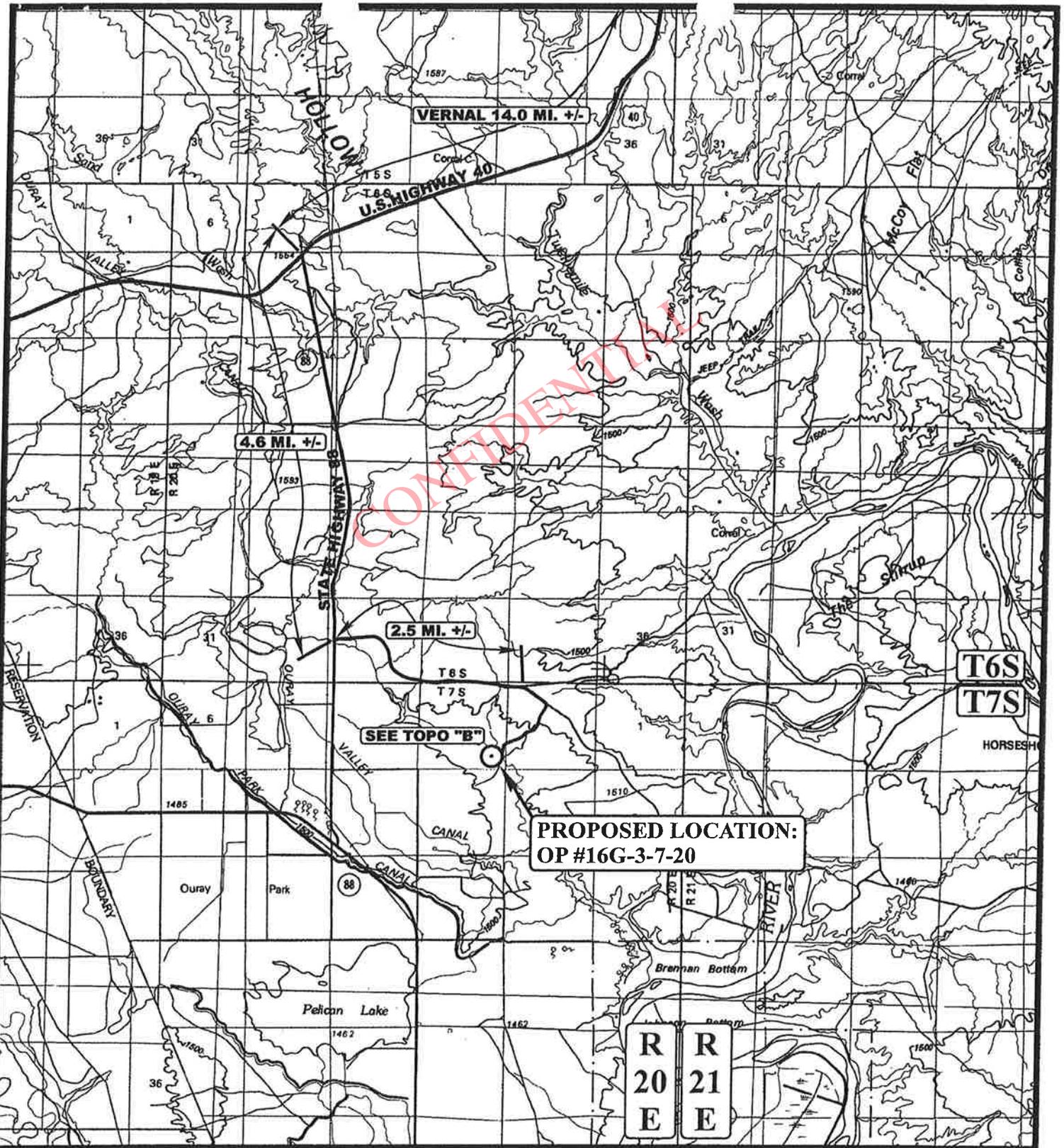
 INTERIM RECLAMATION

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QEP ENERGY COMPANY  
OP #16G-3-7-20  
SECTION 3, T7S, R20E, S.L.B.&M.

PROCEED IN AN WESTERLY, THEN SOUTHWESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF HIGHWAY 40 AND STATE HIGHWAY 88 TO THE SOUTH; TURN LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 4.6 MILES TO THE JUNCTION OF STATE HIGHWAY 88 AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 2.5 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST; TURN RIGHT AND PROCEED IN A SOUTHEASTERLY DIRECTION APPROXIMATELY 0.4 MILES TO AN EXISTING ROAD AND THE BEGINNING OF THE PROPOSED ACCESS TO THE SOUTHWEST; TURN RIGHT AND PROCEED IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 1.0 MILES TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 22.5 MILES.



**LEGEND:**

⊙ PROPOSED LOCATION

**QEP ENERGY COMPANY**

OP #16G-3-7-20  
 SECTION 3, T7S, R20E, S.L.B.&M.  
 788' FSL 863' FEL



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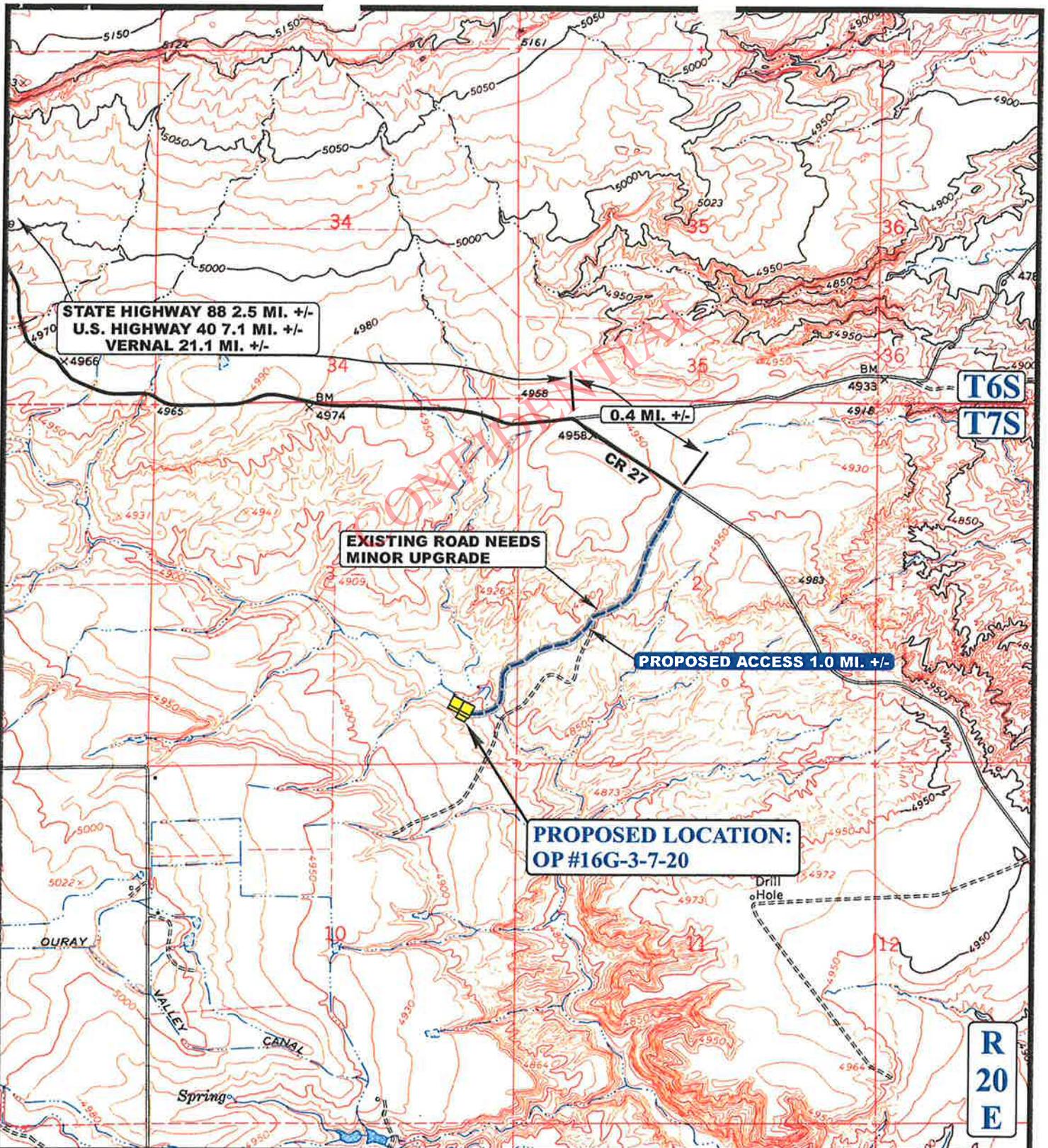


TOPOGRAPHIC  
 MAP

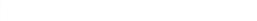
08 27 10  
 MONTH DAY YEAR

SCALE: 1:100,000 | DRAWN BY: J.L.G. | REVISED: 00-00-00





**LEGEND:**

-  EXISTING ROAD
-  EXISTING ROAD NEEDS MINOR UPGRADE
-  PROPOSED ACCESS ROAD

**QEP ENERGY COMPANY**

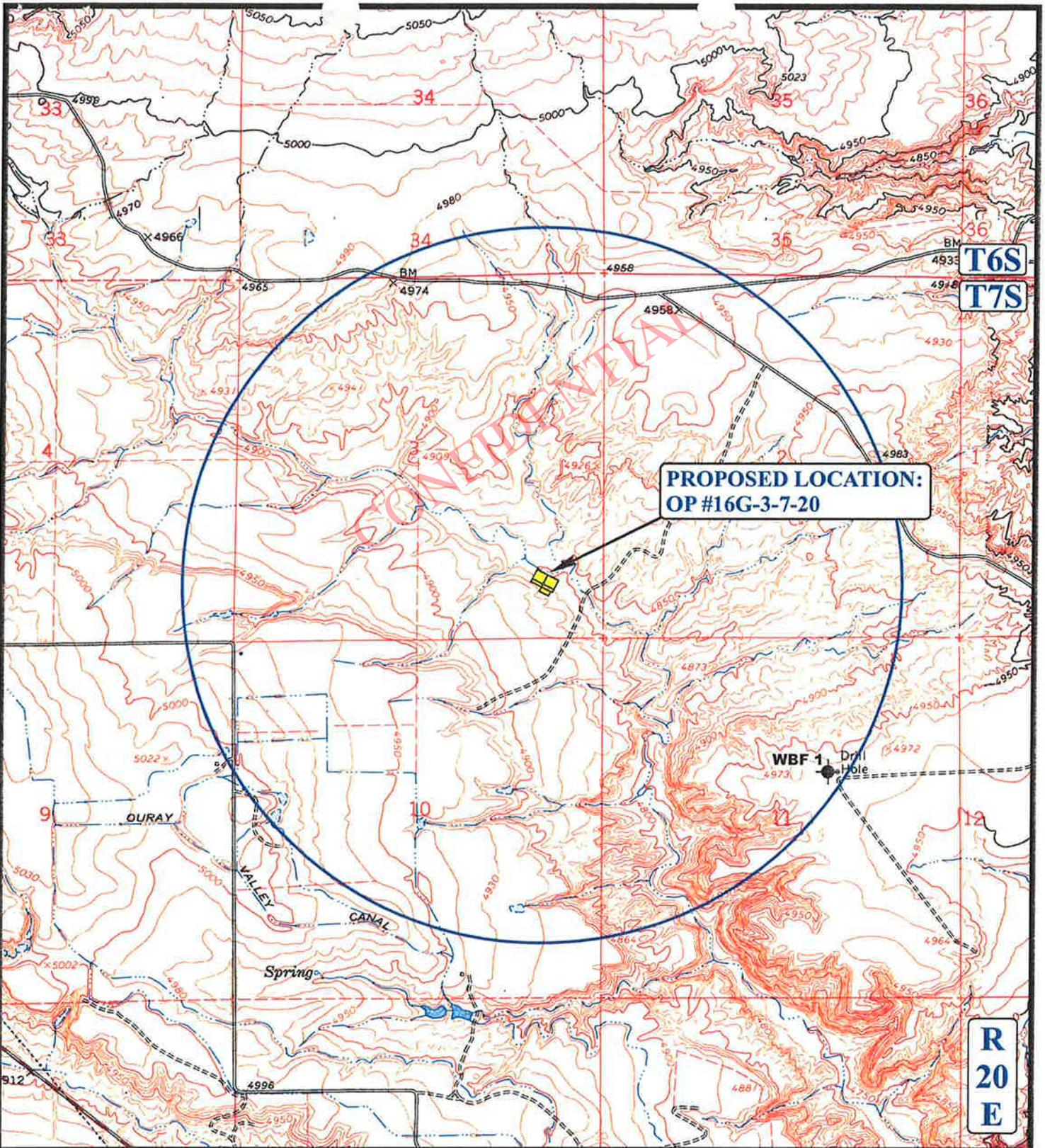
**OP #16G-3-7-20**  
**SECTION 3, T7S, R20E, S.L.B.&M.**  
**788' FSL 863' FEL**



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

**TOPOGRAPHIC MAP** 08 27 10  
 MONTH DAY YEAR  
 SCALE: 1" = 2000' DRAWN BY: J.L.G. REVISED: 00-00-00

**B**  
**TOPO**



**PROPOSED LOCATION:  
OP #16G-3-7-20**

**LEGEND:**

- ⊗ DISPOSAL WELLS
- PRODUCING WELLS
- SHUT IN WELLS
- ⊗ WATER WELLS
- ABANDONED WELLS
- TEMPORARILY ABANDONED



**QEP ENERGY COMPANY**

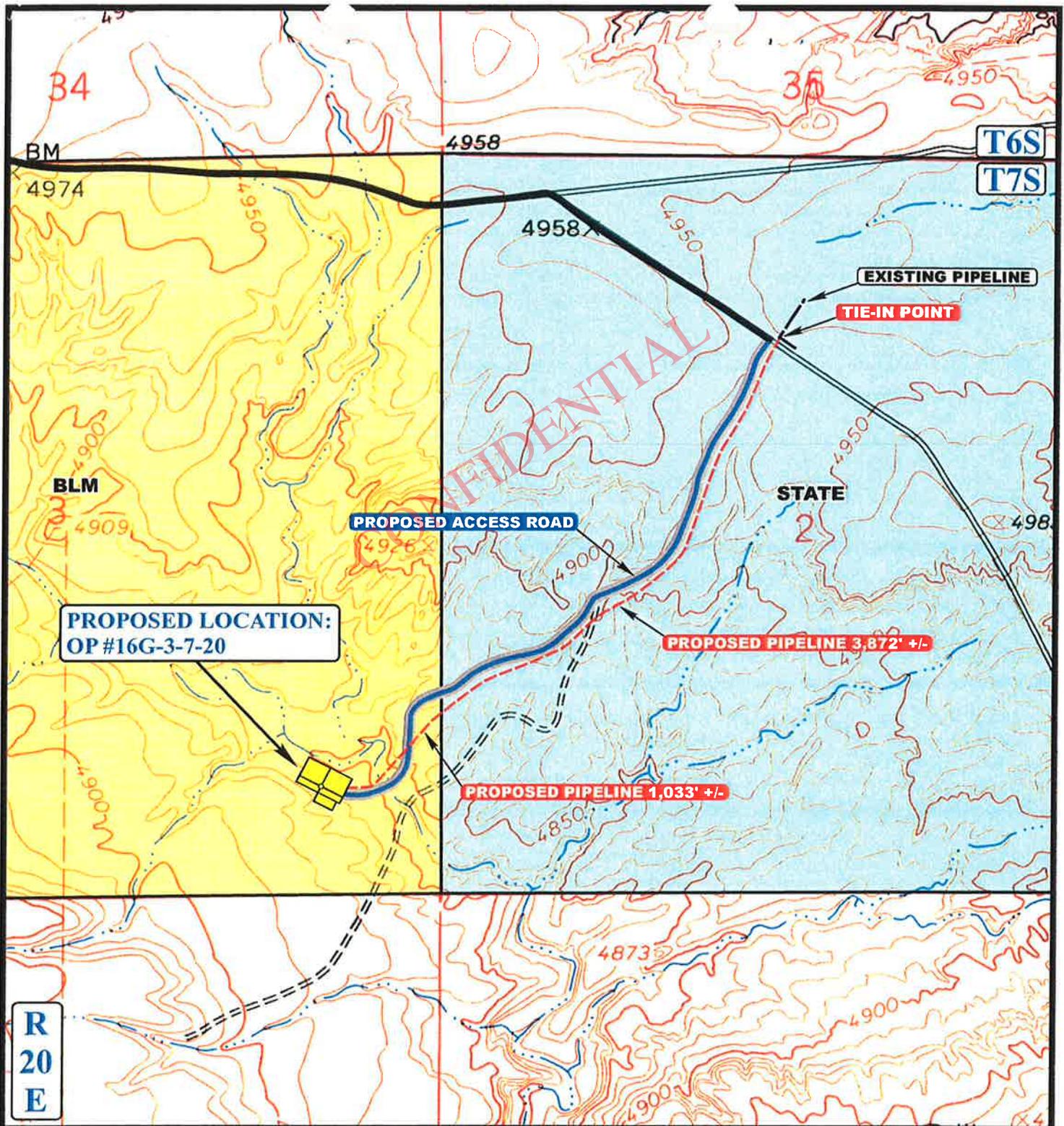
**OP #16G-3-7-20**  
**SECTION 3, T7S, R20E, S.L.B.&M.**  
**788' FSL 863' FEL**



**Utah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
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**TOPOGRAPHIC MAP** 08 27 10  
 MONTH DAY YEAR  
 SCALE: 1" = 2000' DRAWN BY: J.L.G. REVISED: 00-00-00





**APPROXIMATE TOTAL PIPELINE DISTANCE = 4,905' +/-**

**LEGEND:**

- EXISTING PIPELINE
- PROPOSED PIPELINE
- PROPOSED ACCESS

**QEP ENERGY COMPANY**

**OP #16G-3-7-20**  
**SECTION 3, T7S, R20E, S.L.B.&M.**  
**788' FSL 863' FEL**



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

**TOPOGRAPHIC MAP**

SCALE: 1" = 2000' DRAWN BY: J.L.G. REV: 09-09-10 J.J.

**08 27 10**  
 MONTH DAY YEAR

**D**  
**TOPO**

# QEP ENERGY COMPANY

## REFERENCE MAP: AREA OF VEGETATION

### OP #16G-3-7-20

LOCATED IN UINTAH COUNTY, UTAH  
SECTION 3, T7S, R20E, S.L.B.&M.

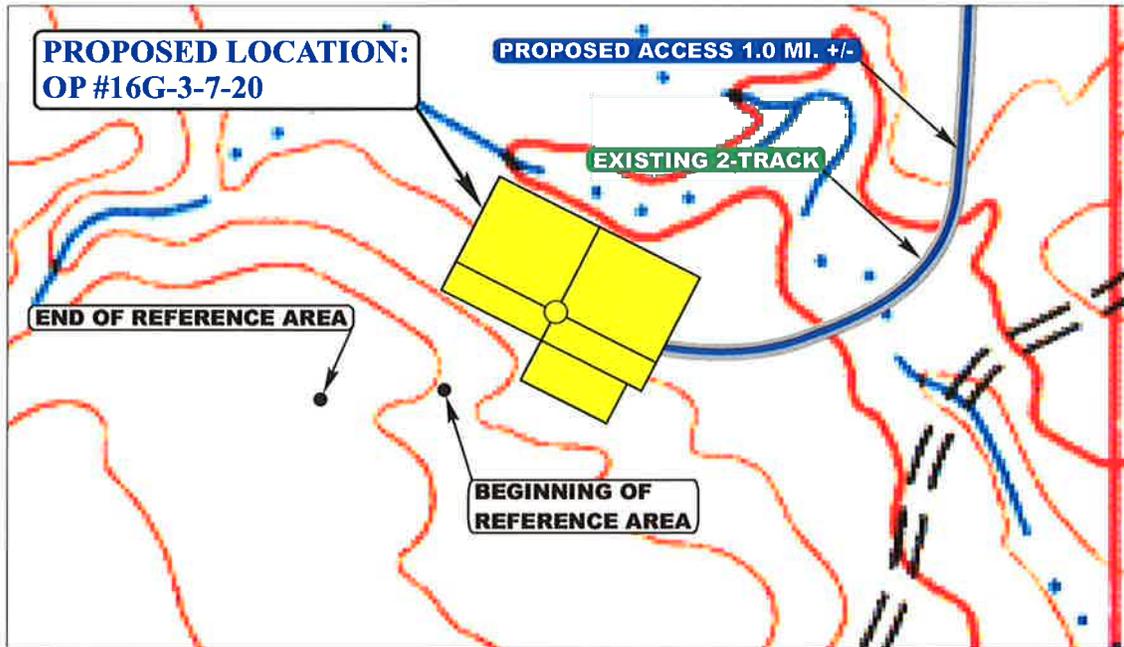


#### NOTE:

**BEGINNING OF REFERENCE AREA**  
**UTM NORTHING: 14615053.487**  
**UTM EASTING: 2017211.768**  
**LATITUDE: 40.234663**  
**LONGITUDE: -109.649937**

**END OF REFERENCE AREA**  
**UTM NORTHING: 14615043.35**  
**UTM EASTING: 2017011.077**  
**LATITUDE: 40.234644**  
**LONGITUDE: -109.650655**

PHOTO: VIEW FROM BEGINNING OF REFERENCE AREA



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

SCALE: 1" = 300'	10	26	10	<b>REF.</b>
TAKEN BY: A.F.	MONTH	DAY	YEAR	
DRAWN BY: Z.L.	REVISED: 00-00-00			

**WEED DATA SHEET**

PROJECT NAME:

OP 116(7-3-7-20)

DATE:

10-13-10

SURVEYOR:

*St*

Location GPS Coordinates	Site Description	Weed Species	Cover Class or Number	Pattern	Infestation Size (acres)

**SITE DRAWING (Optional):** Include a sketch of the infestation within the project area. Count the number of individuals if possible

*Jamaica in wash below location  
(high amounts) on north side of pad*

CONFIDENTIAL

**\*Cover Class-** estimated percent cover, by species, of the infestation

- 0 = No weeds found
- 1 = Less than 1% (trace)
- 2 = One to five % (low - occasional plants)
- 3 = Six to twenty-five % (moderate - scattered plants)
- 4 = Twenty-five to 100 % (high - fairly dense)

**\*Pattern -** pattern of the infestation

- 0 = No weeds found
- 1 = Single plant or small area of many plants
- 2 = Linear
- 3 = Patchy
- 4 = Block

**\*Infestation Size -** number of estimated acres of the infestation

- 0 = No weeds found
- 1 = Less than one acre
- 2 = One to five acres
- 3 = five or more acres

Cheatgrass canopy cover: 4  
 Russian thistle canopy cover: 4  
 Halogeton canopy cover: 4  
 Kochia canopy cover: 2

*Sandy loam*

## **Additional Operator Remarks**

QEP Energy Company proposes to drill a dual lateral horizontal oil well to test the Green River Formation. If productive, casing will be run and the well completed. If, dry the well will be plugged and abandoned as per BLM and State of Utah requirements.

See Onshore Oil & Gas Order No. 1

Please be advised that QEP Energy Company agrees to be responsible under the terms and conditions of the lease for the operations conducted upon the lease lands.

Bond coverage for this well is provided by Bond No.ESB000024. The principal is QEP Energy Company via surety as consent as provided for the 43 CFR 3104.2.

## **Information for Dual Laterals**

### **Surface Location**

788' FSL, 863' FEL, SESE, Section 3, T7S, R20E, Lease Number UTU-14639

### **Lateral 1**

1700' FNL, 700' FWL, SWNW, Section 2, T7S, R20E, Lease Number ML-49758  
2,858.81 Lateral Leg Length @ 29.09 Azimuth (See Attached Drilling Plans)  
TD: 10,436' MD

### **Lateral 2**

2000' FSL, 1000' FWL, NWSW, Section 11, T7S, R20E, Lease Number UTU-86331  
4,103.38 Lateral Leg Length @ 155.33 Azimuth (See Attached Drilling Plans)  
TD: 11,658' MD

**QEP ENERGY COMPANY  
OP 16G-3-7-20  
SESE, SECTION 3, T7S, R20E  
UINTAH COUNTY, UT  
LEASE # UTU-14639**

**MULTI-POINT SURFACE USE & OPERATIONS PLAN**

An onsite inspection was conducted for the OP 16G-3-7-20 on October 13, 2010. Weather conditions were sunny at the time of the onsite. In attendance at the inspection were the following individuals:

Aaron Roe	Bureau of Land Management
Kevin Sadlier	Bureau of Land Management
Jan Nelson	QEP Energy Company
Stephanie Tomkinson	QEP Energy Company
Guy Betts	QEP Energy Company
Bob Haygood	QEP Energy Company
Valyn Davis	QEP Energy Company
Wade Hafey	QEP Field Service
Andy Floyd	Uintah Engineering & Land Surveying

**1. Existing Roads:**

See attached Wellsite Plats showing directional reference stakes on location, and attached TOPO Map "B" showing access to location from existing roads.

The proposed well site is located approximately 23 miles southwest of Vernal, Utah.  
-See attached TOPO Map "A".

Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

Existing roads will be maintained and repaired as necessary. QEP Energy Company has acquired State Easement 1229 for the existing road that goes through Section 2, T7S, R20E.

**2. Planned Access Roads:**

**An offlease right-of-way is not required. The entire well pad, access road, and pipeline are located within the Ouray Park Unit.**

New or reconstructed roads on BLM surface will be crowned (2 to 3%), ditched, and constructed with a running surface of 18 feet and a maximum disturbed width of 30 feet. Any additional disturbance required due to intersections or sharp curves will be discussed at the on-site and approved by the BLM/VFO AO. Graveling or capping the roadbed will be performed as necessary to provide a well constructed, safe road. Surface disturbance and vehicular traffic will be limited to the approved location and access route or, as proposed by the Operator. Prior to construction or upgrading, the proposed road shall be cleared of any snow and allowed to dry completely.

Access roads and surface disturbing activities will conform to standards outlined in the BLM and Forest Service publication: Surface Operating Standards for Oil and gas Exploration and Development, Fourth Edition 2006.

The road surface and shoulders will be kept in a safe and usable condition and will be maintained in accordance with the original construction standards. All drainage ditches and culverts will be kept clear and free-flowing and will be maintained according to original construction standards. The access road disturbed area will be kept free of trash during operations. All traffic will be confined to the approved road running surface. Road drainage crossings shall be of the typical dry creek drainage crossing type. Crossings shall be designed so they will not cause excess siltation or accumulation of debris in the drainage nor shall the drainage be blocked by the roadbed. If culverts are needed, the location and size of the culverts will be proposed during the on-site. The operator will clean and maintain approved culverts as needed. Erosion of drainage ditches by runoff water shall be prevented by diverting water off at frequent intervals by means of cutouts. Should mud holes develop, the holes shall be filled in and detours around the holes avoided. When snow is removed from the road during the winter months, the snow should be pushed outside of the borrow ditches, and the turnouts kept clear so that snowmelt will be channeled away from the road.

Rock, Gravel and Culverts as needed.

Refer to Topo Map B for the location of the proposed access road.

**3. Location of Existing Wells Within a 1-Mile Radius:**

A map will be provided with the site-specific APD showing the location of existing wells within a one mile radius.

Please refer to Topo map C.

**4. Location of Existing and Proposed Facilities:**

The following guidelines will apply if the well is productive.

A containment dike will be constructed completely around those production facilities which contain fluids (i.e., production tanks, produced water tanks). These dikes will be constructed of compacted impervious subsoil; hold 110% of the capacity of the largest tank; and, be independent of the back cut. If a Spill Prevention, Control, and Countermeasure (SPCC) Plan is required by the Environmental Protection Agency, the containment dike may be expanded to meet SPCC requirements with approval by the BLM/VFO AO. The specific APD will address additional capacity if such is needed due to environmental concerns. The use of topsoil for the construction of dikes will not be allowed.

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

All permanent (on site six months or longer) above the ground structures constructed or installed, including pumping units, will be painted a color approved by the BLM.

It was determined on the onsite by the BLM VFO/AO that the facilities will be painted Covert Green.

**Surface gas pipelines will be constructed in accordance with the following guidance:**

**GAS SALES LINE:** The pipeline will be unpainted steel, 4" inside diameter, welded, schedule # 20 or greater. The pipeline on BLM surface will be 1,033' in length. The pipeline will be strung along the right-of-way and welded into place. The pipeline will tie into our existing line located in the NW/4 of Section 2, T7S, R20E.

**FUEL GAS LINE:** The pipeline will be a 2" inside diameter, poly pipe with a rating of 160 psi or greater. The line will be laid adjacent to the gas sales line following the line to location.

For the proposed section of pipe line located on State Administered Lands, QEP Energy Company has applied for a Pipe Line Easement.

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

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.

**6. Source of Construction Materials:**

Surface and subsoil materials in the immediate area will be utilized.

Any gravel will be obtained from a commercial source.

**7. Methods of Handling Waste Materials:**

Drill cuttings will be contained and buried in the reserve pit.

Drilling fluids including salts and chemicals will be contained in the reserve pit. Upon termination of drilling and completion operations, the liquid contents of the reserve pit will be used at the next drill site or will be removed and disposed of at an approved waste disposal facility within 6 months after drilling is terminated. Immediately upon well completion, any hydrocarbons in the pit shall be removed in accordance with 43 CFR 3162.7-1.

Unless specified in the site specific APD, the reserve pit will be constructed on the location and will not be located within natural drainages, where a flood hazard exists or surface runoff will destroy or damage the pit walls. The reserve pit will be constructed so that it will not leak, break, or allow discharge of liquids.

It was determined at the on-site inspection that a pit liner is necessary; the reserve pit will be lined with a synthetic reinforced liner, a minimum of 20

millimeters thick, with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash or scrap will be disposed of in the pit.

Reserve pit leaks are considered an undesirable event and will be orally reported to the AO.

### **Disposal of Produced Water:**

After first production, produced wastewater will be confined to the approved pit or storage tank for a period not to exceed 90 days. During the 90 day period, in accordance with Onshore Order # 7, all produced water will be contained in tanks on location and then hauled to the Red Wash Disposal well located in the SESE, Section 28, T7S, R23E; the West End Disposal located in the NESE, Section 28, T7S, R22E, or, the NBE 12SWD-10-9-23 Disposal located in NWSW, Section 10, T9S, R23E, or third-party surface evaporative pits.

Produced water, oil, and other byproducts will not be applied to roads or well pads for control of dust or weeds. The dumping of produced fluids on roads, well sites, or other areas will not be allowed.

Any spills of oil, gas, salt water, or other noxious fluids will be immediately cleaned up and removed to an approved disposal site. The spills will be reported to the AO and other authorities as appropriate.

A chemical porta-toilet will be furnished with the drilling rig. The chemical porta-toilet wastes will be hauled to Ashley Valley Sewer and Water System for disposal.

Garbage, trash, and other waste materials will be collected in a portable, self-contained, fully enclosed trash cage during operations. Trash will not be burned on location. All debris and other waste material not contained in the trash cage will be cleaned up and removed from the location immediately after removal of the drilling rig. All trash and waste material will be hauled to the Uintah County Landfill.

No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completing of wells. Furthermore, extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will not be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completing of wells within these areas. Specific APD's shall address any modifications from this policy.

### **8. Ancillary Facilities:**

This will be an independent well location. Product will be contained in two 500 bbl tanks and then transported from location to delivery site.

A suitable muffler will be installed on pumping unit to help reduce noise control.

**9. Well Site Layout:**

A Location Layout Diagram describing drill pad cross-sections, cuts and fills, and locations of mud tanks, reserve pits, flare pit or flare box, pipe racks, trailer parking, spoil dirt stockpile(s), and the surface material stockpile(s) will be included with the site specific APD.

Please see the attached diagram rig orientation, parking areas, and access roads, as well as the location of the following:

The reserve pit.

The stockpiled topsoil (first six inches), will not be used for facility berms. All brush removed from the well pad during construction will be stockpiled with the topsoil.

The flare pit or flare box will be located downwind from the prevailing wind direction.

Any drainage that crosses the well location will be diverted around the location by using ditches, water diversion drains or berms. If deemed necessary at the on-site, erosion drains may be installed to contain sediments that could be produced from access roads and well locations.

**10. Fencing Requirements:**

Any open pits will be fenced during the operations. The fencing will be maintained until such time as the pits are backfilled.

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

39 inch net wire will 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 two inches above the ground. The barbed wire shall be three inches over 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 2 fence posts shall be no greater than 16 feet.

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

The reserve pit will be fenced on three (3) sides during drilling operations. The fourth side will be put in place when the rig moves off location. The pit will be fenced and maintained until it is backfilled. If drilling operations does not commence within 3 days, the fourth side of the fence will be installed.

## 11. Reclamation Plan:

Reclamation will follow Questar Exploration and Production Company, Uinta Basin Division's Reclamation Plan, September 2009 (Questar's Reclamation Plan) and the BLM Green River District Reclamation Guidelines.

All trash and debris will be removed from the disturbed area.

The disturbed area will be backfilled with subsoil.

Topsoil will be spread to an even, appropriate depth and disced if needed.

Water courses and drainages will be restored.

Erosion control devices will be installed where needed.

Seeding will be done in the fall, prior to ground freeze up.

Seed mix will be submitted to a BLM AO for approval prior to seeding.

Monitoring and reporting will be conducted as stated in Questar's Reclamation Plan. Weed control will be conducted as stated in Questar's Reclamation Plan.

A reference site has been established and is included in this application.

Please see attached Weed Data Sheet.

### Dry Hole/Abandoned Location:

On lands administered by the BLM abandoned well sites, roads, and other disturbed areas will be restored as near as practical to their original condition. Where applicable, these conditions may include the reestablishment of irrigation systems; reestablishment of appropriate soil conditions; and, the reestablishment of vegetation as specified.

All disturbed surfaces will be recontoured to approximate natural contours, with reclamation of the well pad and access road to be performed as soon as practical after final abandonment.

At final abandonment, the Operator will cap the casing with a metal plate a minimum of 0.25 inch thick. The cap will be welded in place and the well location and identity will be permanently inscribed on the cap. The cap will be constructed with a weep hole. The depth of the permanent cap will be determined at the time of final abandonment. Long-term reclamation will then be applied and will follow the reclamation process described in this plan. When reclamation is deemed successful by the Operator and the BLM, the Operator will request a bond release.

**12. Surface Ownership:**

The well pad and access road are located on lands owned by:  
Bureau of Land Management  
170 South 500 East  
Vernal, UT 84078

**13. Other Information:**

Drilling rigs and/or equipment used during drilling operations will not be stacked or stored on Federal lands or State administered lands after the conclusion of drilling operations or at any other time without authorization by the BLM Authorized Officer. If BLM authorization is obtained, such storage is only a temporary measure.

A Class III archeological survey was conducted by Montgomery Archaeology Consultants. A copy of this report was submitted on December 1, 2010, **MOAC Report No. 10-231** by Montgomery Archaeology Consultants. Cultural resource clearance has been recommended for this project.

A paleontological survey was conducted by Intermountain Paleo Consulting. A copy of this report was submitted on February 2, 2010, **Report No. IPC 10-216** by Stephen D. Sandau,. The inspection resulted in the location of no fossils resources; therefore, it's recommended that no restriction should be placed on this project. However, if vertebrate fossil(s) are found during construction a paleontologist should be immediately notified. QEP will provide paleo monitor if needed.

**Per the onsite meeting on October 13, 2010**, the following items were requested/discussed.

There is 6" topsoil.

There is a Burrowing Owl Stipulation from March 1<sup>st</sup> to August 31<sup>st</sup>. No construction or drilling will commence during this period unless otherwise determined by a wildlife biologist that the site is inactive.

**Lessee's or Operator's Representative & Certification:**

Jan Nelson  
Permit Agent  
QEP Energy Company  
11002 East 17500 South  
Vernal, UT 84078  
(435) 781-4331

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

QEP Energy Company is considered to be the operator of the subject well.  
QEP Energy Company agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage pursuant to 43 CFR 3104.2 for lease activities is being provided by Bond No. ESB000024

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that I have full knowledge of the State and Federal laws applicable to this operations; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

  
\_\_\_\_\_  
Jan Nelson

2/18/2011  
\_\_\_\_\_  
Date

# 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)

February 25, 2011

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2011 Plan of Development Ouray Park 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 wells are planned for calendar year 2011 within the Ouray Park Unit, Uintah County, Utah.

API#	WELL NAME	LOCATION
(Proposed PZ Green River)		
43-047-51504	OP 7G-11-7-20	Sec 11 T07S R20E 2144 FNL 1841 FEL
	Lateral 1	Sec 14 T07S R20E 1500 FNL 0700 FEL
	Lateral 2	Sec 02 T07S R20E 1300 FNL 1500 FEL
43-047-51503	OP 16G-3-7-20	Sec 03 T07S R20E 0788 FNL 0863 FEL
	Lateral 1	Sec 02 T07S R20E 1700 FNL 0700 FWL
	Lateral 2	Sec 11 T07S R20E 2000 FSL 1000 FWL

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

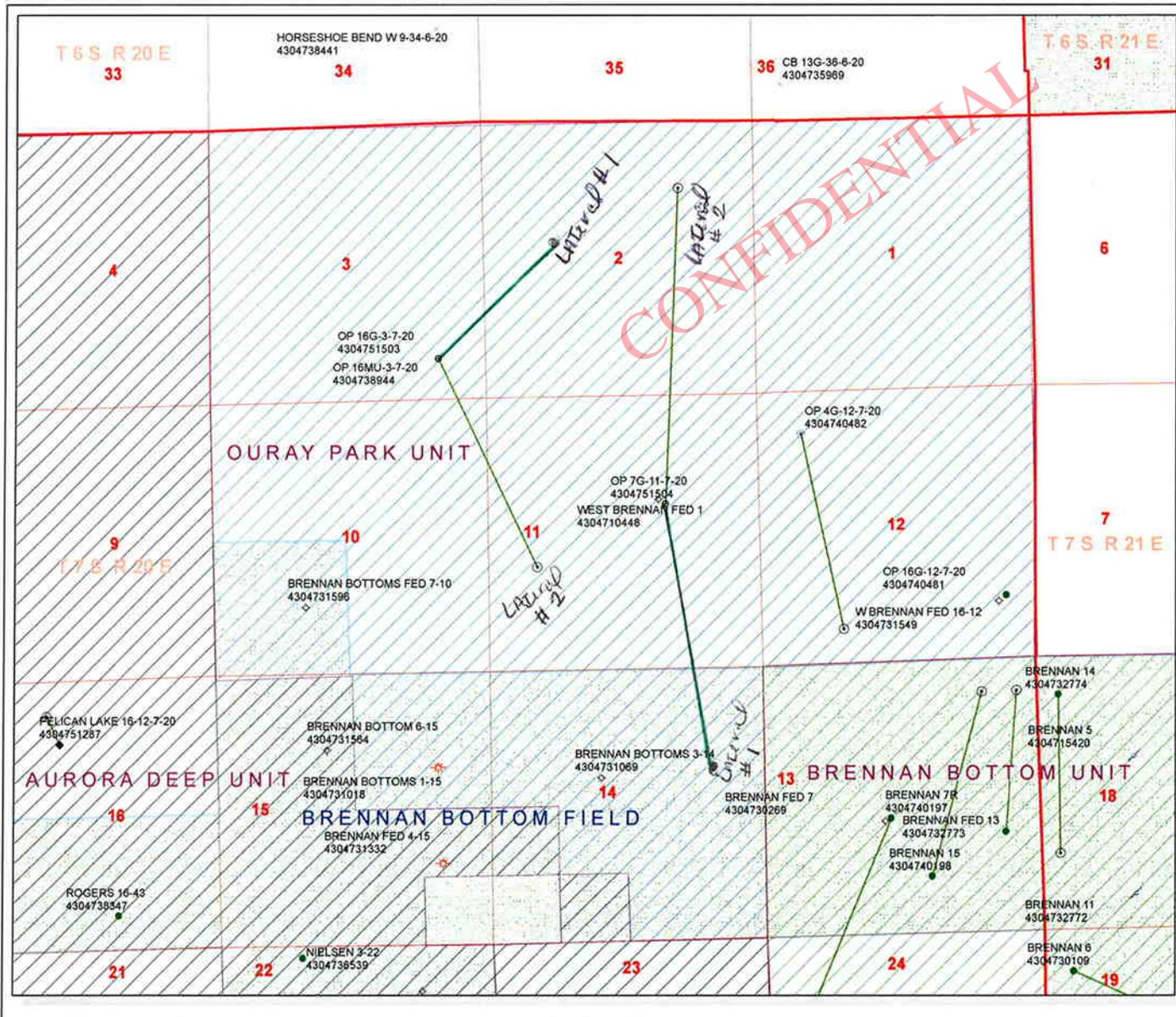
Michael L. Coulthard

Digitally signed by Michael L. Coulthard  
DN: cn=Michael L. Coulthard, o=Bureau of Land Management, ou=Branch of Minerals,  
email=Michael\_Coulthard@blm.gov, c=US  
Date: 2011.02.25 10:41:47 -0700

bcc: File - Ouray Valley Park  
Division of Oil Gas and Mining  
Central Files  
Agr. Sec. Chron  
Fluid Chron

MCoulthard:mc:2-25-11

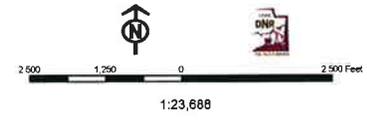




API Number: 4304751503  
 Well Name: OP 16G-3-7-20  
 Township 07.0 S Range 20.0 E Section 03  
 Meridian: SLBM  
 Operator: QEP ENERGY COMPANY

Map Prepared:  
 Map Produced by Diana Mason

Units	Wells Query
ACTIVE	APD - Applied Permit
EXPLOIATORY	ODL - Spud (Driving Commercial)
GAS STORAGE	EGW - Gas Injection
NP PP OIL	GS - Gas Storage
PP OIL	LA - Location Abandoned
NP SECONDARY	LOC - New Location
PP GAS	OPS - Operation Suspended
PP GEOTHERM.	PA - Plugged Abandoned
PP OIL	PGW - Producing Gas Well
SECONDARY	PGW - Producing Oil Well
TERMINATED	RET - Retired APD
Fields	SDW - Shut-in Gas Well
STATUS	SDW - Shut-in Oil Well
UNKNOWN	TA - Temp Abandoned
ABANDONED	TW - Test Well
ACTIVE	WOW - Water Output
COMBINED	WIV - Water Injection Well
INACTIVE	WVW - Water Supply Well
STORAGE	
TERMINATED	
Sections	
Township	



**WORKSHEET  
APPLICATION FOR PERMIT TO DRILL**

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**APD RECEIVED:** 2/23/2011

**API NO. ASSIGNED:** 43047515030000

**WELL NAME:** OP 16G-3-7-20

**OPERATOR:** QEP ENERGY COMPANY (N3700)

**PHONE NUMBER:** 435 781-4331

**CONTACT:** Jan Nelson

**PROPOSED LOCATION:** SESE 03 070S 200E

**Permit Tech Review:**

**SURFACE:** 0788 FSL 0863 FEL

**Engineering Review:**

**BOTTOM:** 2000 FSL 1000 FWL

**Geology Review:**

**COUNTY:** UINTAH

**LATITUDE:** 40.23504

**LONGITUDE:** -109.64863

**UTM SURF EASTINGS:** 614961.00

**NORTHINGS:** 4454510.00

**FIELD NAME:** UNDESIGNATED

**LEASE TYPE:** 1 - Federal

**LEASE NUMBER:** UTU-14639

**PROPOSED PRODUCING FORMATION(S):** GREEN RIVER

**SURFACE OWNER:** 1 - Federal

**COALBED METHANE:** NO

---

**RECEIVED AND/OR REVIEWED:**

- PLAT**
- Bond:** FEDERAL - ESB000024
- Potash**
- Oil Shale 190-5**
- Oil Shale 190-3**
- Oil Shale 190-13**
- Water Permit:** A36125/ 49-2153
- RDCC Review:**
- Fee Surface Agreement**
- Intent to Commingle**

**Commingle Approved**

**LOCATION AND SITING:**

- R649-2-3.**  
**Unit:** OURAY PARK
  - R649-3-2. General**
  - R649-3-3. Exception**
  - Drilling Unit**  
**Board Cause No:** R649-3-2
  - Effective Date:**
  - Siting:**
  - R649-3-11. Directional Drill**
- 

**Comments:** Presite Completed  
HAS MULTI LATS: LAT #1 SEC 2; LAT #3 SEC 11:

**Stipulations:** 4 - Federal Approval - dmason  
15 - Directional - bhill  
23 - Spacing - dmason



GARY R. HERBERT  
*Governor*

GREGORY S. BELL  
*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*

### Permit To Drill

\*\*\*\*\*

**Well Name:** OP 16G-3-7-20  
**API Well Number:** 43047515030000  
**Lease Number:** UTU-14639  
**Surface Owner:** FEDERAL  
**Approval Date:** 3/2/2011

**Issued to:**

QEP ENERGY COMPANY, 11002 East 17500 South, Vernal, Ut 84078

**Authority:**

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of R649-3-2. The expected producing formation or pool is the GREEN RIVER Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

**Duration:**

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

**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.

**Conditions of Approval:**

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

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

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.

**Notification Requirements:**

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

- Within 24 hours following the spudding of the well – contact Carol Daniels at 801-538-5284 (please leave a voicemail message if not available)

OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at <https://oilgas.ogm.utah.gov>

**Reporting Requirements:**

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) – due within 5 days of spudding the well
- Monthly Status Report (Form 9) – due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) – due prior to implementation
- Written Notice of Emergency Changes (Form 9) – due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) – due prior to implementation
- Report of Water Encountered (Form 7) – due within 30 days after completion
- Well Completion Report (Form 8) – due within 30 days after completion or plugging

**Approved By:**

A handwritten signature in black ink, appearing to read "John Rogers", with a stylized flourish at the end.

For John Rogers  
Associate Director, Oil & Gas

<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.	5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-14639
1. TYPE OF WELL Oil Well	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:  7. UNIT or CA AGREEMENT NAME:
2. NAME OF OPERATOR: QEP ENERGY COMPANY	8. WELL NAME and NUMBER: OP 16G-3-7-20
3. ADDRESS OF OPERATOR: 11002 East 17500 South , Vernal, Ut, 84078	PHONE NUMBER: 303 308-3068 Ext
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0788 FSL 0863 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESE Section: 03 Township: 07.0S Range: 20.0E Meridian: S	9. API NUMBER: 43047515030000
	9. FIELD and POOL or WILDCAT: UNDESIGNATED
	COUNTY: UINTAH
	STATE: UTAH

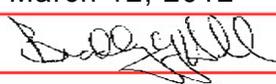
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 3/2/2013	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT 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"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT 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: <input style="width: 100px;" type="text"/>

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

QEP ENERGY 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: March 12, 2012  
 By: 

NAME (PLEASE PRINT) Valyn Davis	PHONE NUMBER 435 781-4369	TITLE Regulatory Affairs Analyst
SIGNATURE N/A	DATE 3/1/2012	



**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 43047515030000**

API: 43047515030000

Well Name: OP 16G-3-7-20

Location: 0788 FSL 0863 FEL QTR SESE SEC 03 TWP 070S RNG 200E MER S

Company Permit Issued to: QEP ENERGY COMPANY

Date Original Permit Issued: 3/2/2011

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

Signature: Valyn Davis

Date: 3/5/2012

Title: Regulatory Affairs Analyst Representing: QEP ENERGY COMPANY

# RECEIVED

Form 3160-3  
(August 2007)

FEB 22 2011

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

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

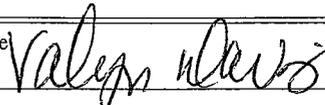
### APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. UTU14639
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator QEP ENERGY COMPANY		7. If Unit or CA Agreement, Name and No.
3a. Address 11002 EAST 17500 SOUTH VERNAL, UT 84078	3b. Phone No. (include area code) 435-781-4369	8. Lease Name and Well No. OP 16G-3-7-20
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface 788' <sup>S</sup> ENL, 863' FEL, SESE At proposed prod. zone 788' <sup>S</sup> ENL, 863' FEL, SESE		9. API Well No. 43-047-51503
14. Distance in miles and direction from nearest town or post office* 22.5 MILES SOUTHWEST OF VERNAL, UT		10. Field and Pool, or Exploratory UNDESIGNATED
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 788'	16. No. of acres in lease 763.68	11. Sec., T. R. M. or Blk. and Survey or Area SEC. 3, T7S, R20E, SLB&M
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 7,600	12. County or Parish UINTAH
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 4863.1 GR	22. Approximate date work will start* 10/01/2012	13. State UT
17. Spacing Unit dedicated to this well 40		
20. BLM/BIA Bond No. on file ESB000024		
23. Estimated duration 30 DAYS		

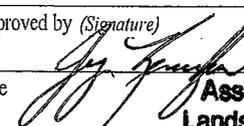
#### 24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

- |  |   |
|--|---|
| 1. Well plat certified by a registered surveyor.   | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan.  | 5. Operator certification   |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the BLM.             |

25. Signature 	Name (Printed/Typed) VALYN DAVIS	Date 07/31/2012
---	-------------------------------------	--------------------

Title  
REGULATORY AFFAIRS ANALYST

Approved by (Signature) 	Name (Printed/Typed) Jerry Kenczka	Date AUG 15 2012
---	---------------------------------------	---------------------

Title  
Assistant Field Manager  
Lands & Mineral Resources

Office  
VERNAL FIELD OFFICE

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, are attached.

### CONDITIONS OF APPROVAL ATTACHED

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.

(Continued on page 2)

# RECEIVED

\*(Instructions on page 2)

## AUG 22 2012

### DIV. OF OIL, GAS & MINERAL RESOURCES NOTICE OF APPROVAL

# UDOGM

NOS 9/30/2010

115XS0012AE



**UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
VERNAL FIELD OFFICE**

170 South 500 East

VERNAL, UT 84078

(435) 781-4400



**CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL**

**Company:** QEP Energy Company  
**Well No:** OP 16G-3-7-20  
**API No:** 43-047-51503

**Location:** SESE, Sec. 3, T7S, R20E  
**Lease No:** UTU-14639  
**Agreement:** N/A

**OFFICE NUMBER: (435) 781-4400**

**OFFICE FAX NUMBER: (435) 781-3420**

**A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR  
FIELD REPRESENTATIVE TO INSURE COMPLIANCE**

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

**NOTIFICATION REQUIREMENTS**

Location Construction (Notify Environmental Scientist)	- Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Environmental Scientist)	- Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	- Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	- Twenty-Four (24) hours prior to running casing and cementing all casing strings to: <a href="mailto:blm_ut_vn_opreport@blm.gov">blm_ut_vn_opreport@blm.gov</a>
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	- Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	- Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

**SURFACE USE PROGRAM  
CONDITIONS OF APPROVAL (COAs)**

- All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horsepower must not emit more than 2 gms of NO<sub>x</sub> per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower.
- All and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gms of NO<sub>x</sub> per horsepower-hour.
- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation may be necessary for the discovered paleontologic material before construction can continue.
- All vehicles and equipment shall be cleaned either through power-washing, or other approved method, if the vehicles or equipment were brought in from areas outside the Uinta Basin, to prevent weed seed introduction.
- All disturbance areas shall be monitored for noxious weeds annually, for a minimum of three growing seasons following completion of project or until desirable vegetation is established.
- Reclamation will be completed in accordance with the Questar Exploration and Production Company, Uintah Basin Division's Reclamation Plan on file with the Vernal Field Office of the BLM.
- In the event historic or archaeological resources are uncovered during construction, work will stop immediately and the appropriate BLM AO will be notified.
- Scientifically important fossils were found at well site, OP 16G-3-7-20 (IPC #10-216, February 2, 2011). Due to the number of fossils found during the survey for OP 16G-3-7-20, a permitted paleontologist will be present to monitor the construction of the access road and well pad.
- If paleontologic resources are uncovered during construction activities, the operator shall immediately suspend all operations that will further disturb such resources, and immediately notify the Authorized Officer (AO). The AO will arrange for a determination of significance and, if necessary, recommend a recovery or avoidance plan.
- Construction and drilling is not allowed from March 1 through August 31 to minimize impacts during burrowing owl nesting. If it is anticipated that construction or drilling would occur during the given timing restriction, a BLM or qualified biologist shall be notified so surveys can be conducted. Depending upon the results of the survey, a recommendation to proceed may or may not be advised by the biologist. Permission may or may not be granted by the Authorized Officer.
- All internal combustion equipment will be kept in good working order.
- Water or other approved dust suppressants will be used at construction sites and along roads, as determined appropriate by the Authorized Officer.

- Open burning of garbage or refuse will not occur at well sites or other facilities.
- Drill rigs will be equipped with Tier II or better diesel engines.
- Low bleed pneumatics will be installed on separator dump valves and other controllers. The use of low bleed pneumatics will result in a lower emission of VOCs.
- During completion, flaring will be limited as much as possible. Production equipment and gathering lines will be installed as soon as possible.
- Well site telemetry would be utilized as feasible for production operations.
- Following well plugging and abandonment, the location, access roads, pipelines, and other facilities shall be reclaimed. All disturbed surfaces shall be reshaped to approximate the original contour; the top soil respread over the surface; and, the surface revegetated. The surface of approved staging areas where construction activities did not occur may require disking or ripping and reseeding.
- The best method to avoid entrainment is to pump from an off-channel location – one that does not connect to the river during high spring flows. An infiltration gallery constructed in a BLM and Service approved location is best.
- If the pump head is located in the river channel where larval fish are known to occur, the following measures apply:
  - do not situate the pump in a low-flow or no-flow area as these habitats tend to concentrate larval fishes;
  - limit the amount of pumping, to the greatest extent possible, during that period of the year when larval fish may be present (April 1 to August 31); and
  - limit the amount of pumping, to the greatest extent possible, during the pre-dawn hours as larval drift studies indicate that this is a period of greatest daily activity.
- Screen all pump intakes with 3/32" mesh material.
- Approach velocities for intake structures will follow the National Marine Fisheries Service's document "Fish Screening Criteria for Anadromous Salmonids". For projects with an in-stream intake that operate in stream reaches where larval fish may be present, the approach velocity will not exceed 0.33 feet per second (ft/s).
- Report any fish impinged on the intake screen to the Service (801.975.3330) and the Utah Division of Wildlife Resources:
  - Northeastern Region
  - 152 East 100 North, Vernal, UT 84078
  - Phone: (435) 781-9453

**DOWNHOLE PROGRAM  
CONDITIONS OF APPROVAL (COAs)**

**SITE SPECIFIC DOWNHOLE COAs:**

- Production casing (size casing 7 inch) cement shall be brought up and into the surface.
- A variance is granted for Onshore Order #2 Drilling Operations III. E. "Blooie line discharge 100 feet from well bore and securely anchored." Blooie line can be 50 to 70 feet.  
All requirements will be adhered to covering air/gas drilling operations as described in Onshore Order #2 III. E. 1. Drilling Operations, Special Drilling Operations, air/gas drilling.

**All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to.** The following items are emphasized:

**DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS**

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each

encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- **Please submit an electronic copy of all other logs run on this well in LAS format to BLM\_UT\_VN\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

## OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at [www.ONRR.gov](http://www.ONRR.gov).
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
  - Operator name, address, and telephone number.
  - Well name and number.
  - Well location (¼¼, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - Unit agreement and/or participating area name and number, if applicable.
  - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs,

core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers 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 shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 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 Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9  5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-14639
<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.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:  7. UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Oil Well	8. WELL NAME and NUMBER: OP 16G-3-7-20
2. NAME OF OPERATOR: QEP ENERGY COMPANY	9. API NUMBER: 43047515030000
3. ADDRESS OF OPERATOR: 11002 East 17500 South , Vernal, Ut, 84078	PHONE NUMBER: 303 308-3068 Ext
9. FIELD and POOL or WILDCAT: BRENNAN BOTTOM	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0788 FSL 0863 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESE Section: 03 Township: 07.0S Range: 20.0E Meridian: S	COUNTY: UINTAH
	STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 10/1/2012  <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:  <input type="checkbox"/> SPUD REPORT Date of Spud:  <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE  <input checked="" 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 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 style="width: 100px;" type="text"/>

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

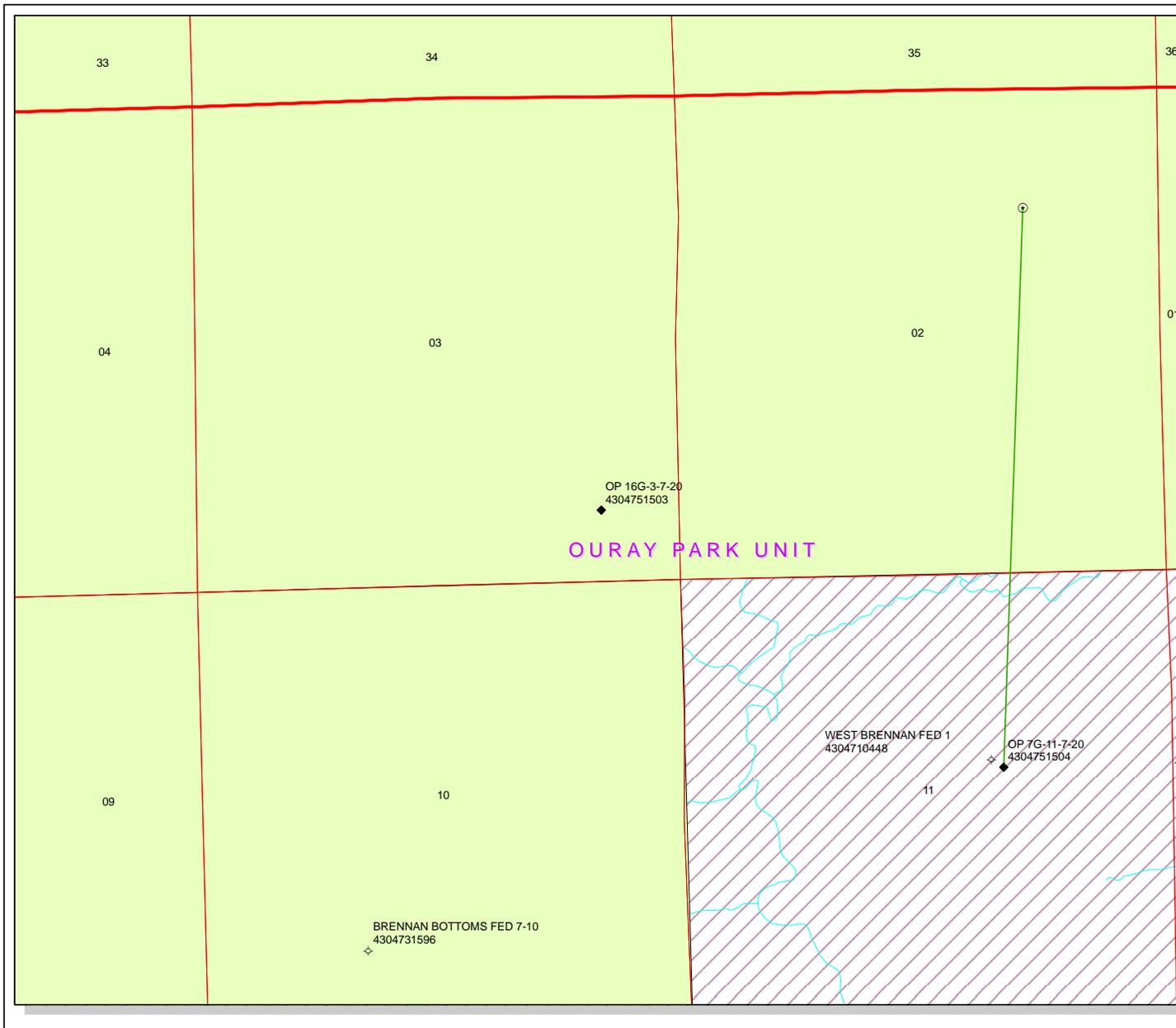
QEP ENERGY COMPANY ORIGINALLY PERMITTED THIS WELL AS A HORIZONTAL DUAL LATERAL. QEP ENERGY COMPANY REQUESTS AUTHORIZATION TO **CHANGE THIS WELL FROM A DUAL LATERAL HORIZONTAL WELL TO A VERTICAL WELL.**

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

Date: September 13, 2012

By: 

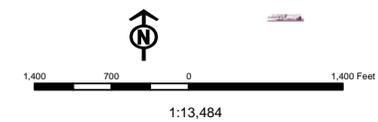
NAME (PLEASE PRINT) Valyn Davis	PHONE NUMBER 435 781-4369	TITLE Regulatory Affairs Analyst
SIGNATURE N/A	DATE 8/14/2012	



**API Number: 4304751503**  
**Well Name: OP 16G-3-7-20**  
 Township T07.0S Range R20.0E Section 03  
**Meridian: SLBM**  
 Operator: QEP ENERGY COMPANY

Map Prepared:  
 Map Produced by Diana Mason

- | Units         | Wells Query                        |
|---------------|------------------------------------|
| <b>STATUS</b> | <b>STATUS</b>                      |
| ACTIVE        | APD - Approved Permit              |
| EXPLORATORY   | DRL - Spudded (Drilling Commenced) |
| GAS STORAGE   | GIW - Gas Injection                |
| NF PP OIL     | GS - Gas Storage                   |
| NF SECONDARY  | LOC - New Location                 |
| P1 OIL        | OPS - Operation Suspended          |
| PP GAS        | PA - Plugged Abandoned             |
| PP GEOTHERML  | PGW - Producing Gas Well           |
| PP OIL        | POW - Producing Oil Well           |
| SECONDARY     | SGW - Shut-in Gas Well             |
| TERMINATED    | SOW - Shut-in Oil Well             |
| <b>Fields</b> | TA - Temp. Abandoned               |
| <b>STATUS</b> | TW - Test Well                     |
| ABANDONED     | WDW - Water Disposal               |
| ACTIVE        | WW - Water Injection Well          |
| COMBINED      | WSW - Water Supply Well            |
| INACTIVE      | Bottom Hole Location - Oil/Gas/Dls |
| STORAGE       |                                    |
| TERMINATED    |                                    |



Sundry Number: 28934 API Well Number: 43047515030000

T7S, R20E, S.L.B.&M.

QEP ENERGY COMPANY

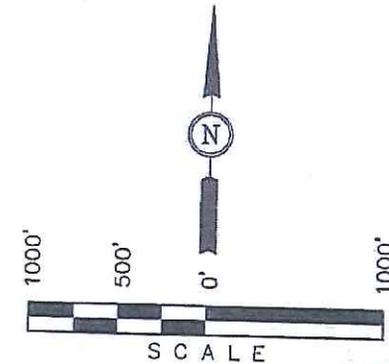
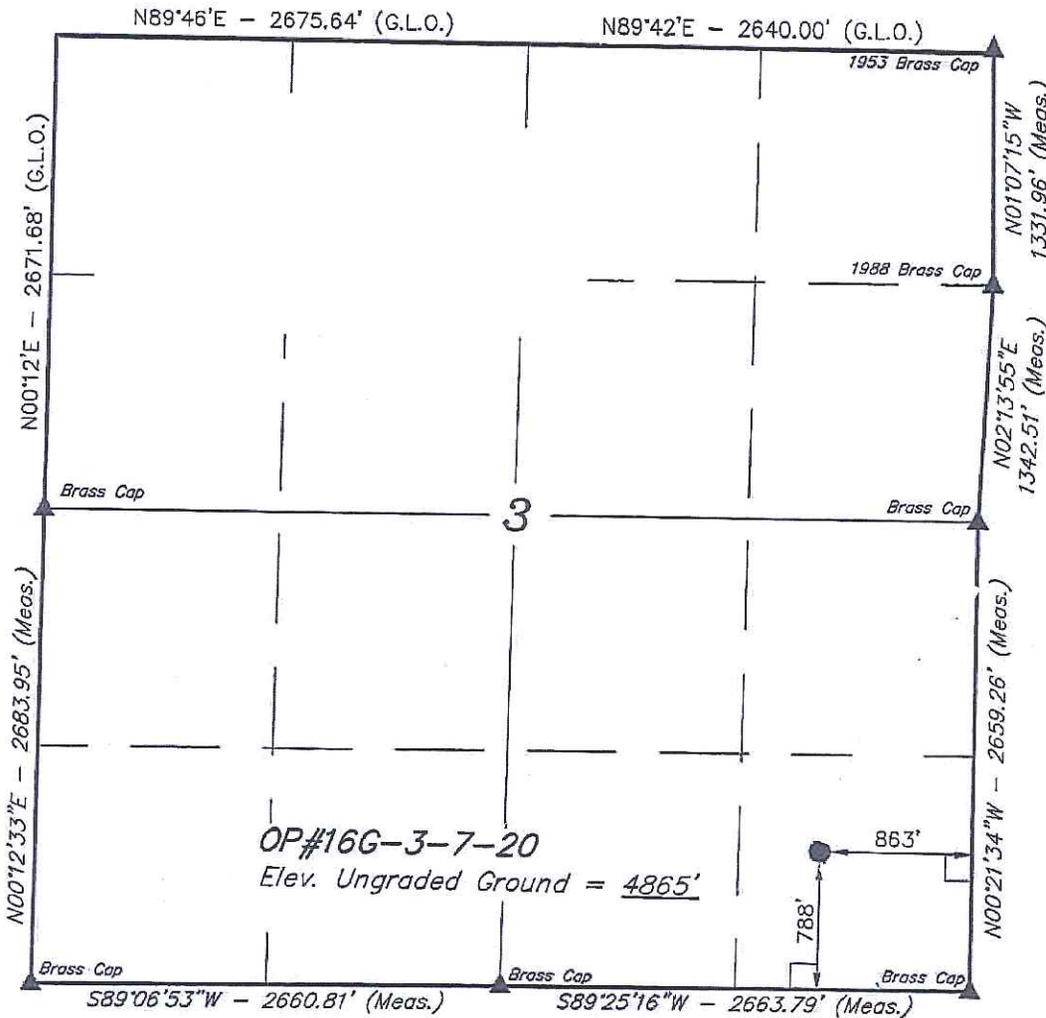
Well location, OP#16G-3-7-20, (SURFACE LOCATION) located as shown in the SE 1/4 SE 1/4 of Section 3, T7S, R20E, S.L.B.&M., Uintah County, Utah.

BASIS OF ELEVATION

BENCH MARK (38EAM) LOCATED IN THE SW 1/4 OF SECTION 9, T7S, R20E, S.L.B.&M. TAKEN FROM THE PELICAN LAKE, 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 4942 FEET.

BASIS OF BEARINGS

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



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.

*[Signature]*  
 REGISTERED LAND SURVEYOR  
 REGISTRATION NO. 161319  
 STATE OF UTAH

LEGEND:

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

(AUTONOMOUS NAD 83)  
 LATITUDE = 40°14'05.99" (40.234997)  
 LONGITUDE = 109°38'57.65" (109.649347)  
 (AUTONOMOUS NAD 27)  
 LATITUDE = 40°14'06.13" (40.235036)  
 LONGITUDE = 109°38'55.15" (109.648653)

UINTAH ENGINEERING & LAND SURVEYING

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

SCALE 1" = 1000'	DATE SURVEYED: 08-16-10	DATE DRAWN: 08-25-10
PARTY B.B. B.H. J.I.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE QEP ENERGY COMPANY	

**QEP Energy**  
**OP 16G-3-7-20**  
**Vertical Well**  
**Summarized Procedure**

1. MIRU air rig.
2. Drill 12 1/4" surface hole to 480', run 9 5/8", 36#, J-55, STC, cement to surface.
3. RD air rig, move off location.
4. MIRU drilling rig.
5. NU rig's 3,000 WP rated BOP. Test BOP's and surface casing.
6. PU straight hole BHA, drill out surface casing and 10' of new formation, run FIT.
7. Drill 8 3/4" hole to ~7,600, TD.
8. Mud system will be water based. Mud weights from 8.6 – 9.5 ppg, Max 10.0 ppg.
9. TOOH, LDDP.
10. Log hole.
11. PU and run 7", 26#, N-80 LTC casing to intermediate TD. Cement same.
12. RDMOL

ONSHORE OIL & GAS ORDER NO. 1  
QEP ENERGY COMPANY  
OP 16G-3-7-20

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:

<u>Formation</u>	<u>Depth</u>
Green River	4,200'
X Marker	6,413'
G1 Lime	7,107'
H4a	7,335'
TD	7,600'

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:

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
Oil/Gas	H4a	7,340'

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.

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.

ONSHORE OIL & GAS ORDER NO. 1  
 QEP ENERGY COMPANY  
 OP 16G-3-7-20

**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 Program**

Hole Size	Casing Size	Top, MD	Bottom, MD	Weight, lb/ft	Grade	Thread	Condition	MW
17 1/2"	14"	sfc	40'	Steel	Cond.	None	Used	Air
12 1/4"	9 5/8"	sfc	480'	36.0	J-55	STC	New	Air
8 3/4"	7"	sfc	7,600'	26.0	N-80	LTC	New	8-9 ppg

Casing Strengths:				Collapse	Burst	Tensile (minimum)
9 5/8"	36.0 lb.	J-55	STC	2,020 psi	3,520 psi	394,000 lb.
7"	26.0 lb.	N-80	LTC	5,410 psi	7,240 psi	519,000 lb.

Please refer to the attached wellbore diagram procedure for further details.

ONSHORE OIL & GAS ORDER NO. 1  
QEP ENERGY COMPANY  
OP 16G-3-7-20

5. Cementing Program

**20" Conductor:**

Cement to surface with construction cement.

**9-5/8" Surface Casing: sfc – 480' (MD)**

**Lead/Tail Slurry:** 0' – 480'. 170 sks (310 cu ft) Rockies LT cement + 0.25 lb/sk Kwik Seal + 0.125 lb/sk Poly-E-Flake. Slurry wt: 13.5 ppg, Slurry yield: 1.81 ft<sup>3</sup>/sk, Slurry volume: 12-1/4" hole + 100% excess.

**7" Production Casing: sfc – 7,600' (MD)**

**Lead:** Sfc – 6,000' 430 sks (1350 cu ft) Halliburton Extendacem Cement + 3 pps Silicalite (Light Weight Additive) + 1% Econolite (Light Weight Additive) + 0.25 pps Poly-E-Flake (Lost Circulation Additive) + 1 pps Granulite TR ¼ (Lost Circulation Additive). Slurry Weight 11 lb/gal, Slurry Yield 3.194 ft<sup>3</sup>/sk, 50% Excess

**Tail Slurry:** 6,000' – 7,600'. 270 sks (370 cu ft) Bondcem Cement + 0.1% Fe-2 (Retarder) + 0.3% Halad (R)-344 (Fluid Loss Control) + 0.2% Versaset (Thixotropic Additive) + 0.2 % Super CBL Expander + 0.125 lb/sk Poly-E-Flake + 1.0 pps Granulite TR ¼ (Lost Circulation Additive). Slurry wt: 13.5 ppg, Slurry yield: 1.4 ft<sup>3</sup>/sk, 50% excess.

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
- f. Request For Variance

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

ONSHORE OIL & GAS ORDER NO. 1  
QEP ENERGY COMPANY  
OP 16G-3-7-20

of Order #2 is requested because surface casing depth for this well is 480 feet and high pressures are not expected.

1. **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.
2. **Blooiie line discharge 100 feet from wellbore and securely anchored** – the blooiie 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.
3. **Automatic igniter or continuous pilot light on blooiie line** – a diffuser will be used rather than an automatic pilot/igniter. Water is injected into the compressed air and eliminates the need for a pilot light and the need for dust suppression equipment.
4. **Compressors located in the opposite direction from the blooiie line a minimum of 100 feet from the wellbore** – compressors located within 50 feet on the opposite side of the wellbore from the blooiie line and is equipped with a 1) emergency kill switch on the driller's console, 2) pressure relief valves on the compressors, 3) spark arrestors on the motors.
5. **Kill Fluid to control well** – In lieu of having mud products on location to kill the well for an unanticipated kick, Questar will kill the well with water contained in a 400 bbl tank on site. The 400 bbl water tank will also be storage for surface casing cement water.
6. **Deflector on the end of the blooiie line** – Questar will mount a deflector unit at the end of the blooiie 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 blooiie. A washed out deflector will be easily replaced.
7. **Flare Pit** – there will be no need of a flare pit during the surface hole air drilling operation because the blooiie line is routed directly to the reserve pit. When the big rig arrives for the main drilling after setting surface casing, a flare box will be installed and all flare lines will be routed to the flare box.

Drilling of the laterals will be done with fresh water NaCl based mud systems consisting primarily of fresh water, bentonite, lignite, caustic, lime, soda ash, polymers, and NaCl. 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 10.0 ppg.

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

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

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

ONSHORE OIL & GAS ORDER NO. 1  
QEP ENERGY COMPANY  
OP 16G-3-7-20

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. Open Hole Logs: Triple Combo in Pilot Hole (GR-SP-CAL-DN-PE)
- d. Formation and completion interval: H4a 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 3,952 psi. Maximum anticipated bottom hole temperature is approximately 150°F.

**OP 16G-3-7-20**

Updated 07-11-2012 CRA

API # 43-013-xxxxx

Proposed WBD

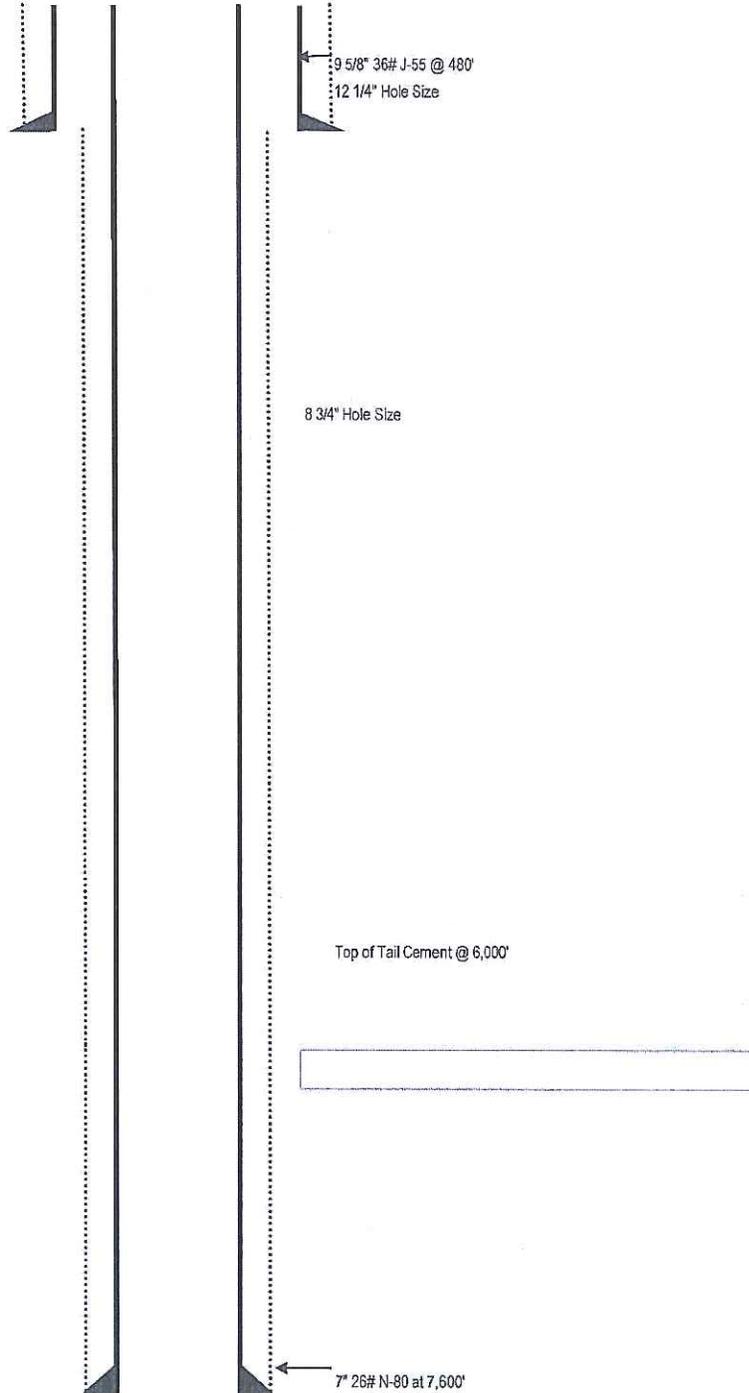
Uinta Basin

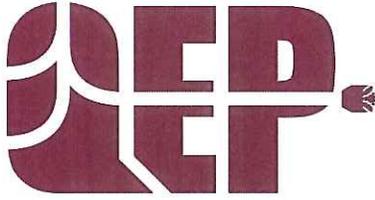
Section 3, T7S, R20E, Uintah County

KB 4,879'

GL 4,865'

NOTE: NOT TO SCALE





**QEP Energy Company**

11002 East 17500 South  
Vernal, UT 84078  
Telephone 435-781-4331  
Fax 435-781-4395

August 31, 2012

Ms. Diana Mason  
Division of Oil, Gas and Mining  
P.O. Box 145801  
Salt Lake City, UT 84114-6100

RE: Exception Location R649-3-3  
**OP 16G-3-7-20**  
788' FSL 863' FEL, SESE, Section 3, T7S, R20E  
Uintah County, Utah

Dear Ms. Mason:

Pursuant to the filing of QEP Energy Company Application for Permit to Drill regarding the above referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649 -3-3. In reference to the above mentioned rule, the OP 16G-3-7-20 is an exception to this rule due to topography.

Furthermore, QEP Energy Company certifies that it is the sole working interest owner within 460 feet of the proposed location.

Therefore, based on the above stated information QEP Energy Company requests the permit be granted pursuant to Rule R649-3-11.

If you have any questions please contact Valyn Davis at 435-781-4369.

Sincerely,

A handwritten signature in blue ink that reads 'Valyn Davis'.

Valyn Davis  
QEP Energy Company  
Regulatory Affairs Analyst

<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> UTU-14639	
<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>	
<b>7. UNIT or CA AGREEMENT NAME:</b>	
<b>8. WELL NAME and NUMBER:</b> OP 16G-3-7-20	
<b>9. API NUMBER:</b> 43047515030000	
<b>9. FIELD and POOL or WILDCAT:</b> BRENNAN BOTTOM	
<b>COUNTY:</b> UINTAH	
<b>STATE:</b> UTAH	

**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	<b>8. WELL NAME and NUMBER:</b> OP 16G-3-7-20
<b>2. NAME OF OPERATOR:</b> QEP ENERGY COMPANY	<b>9. API NUMBER:</b> 43047515030000
<b>3. ADDRESS OF OPERATOR:</b> 11002 East 17500 South , Vernal, Ut, 84078	<b>9. FIELD and POOL or WILDCAT:</b> BRENNAN BOTTOM
<b>PHONE NUMBER:</b> 303 308-3068 Ext	<b>COUNTY:</b> UINTAH
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0788 FSL 0863 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SESE Section: 03 Township: 07.0S Range: 20.0E Meridian: S	<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: 3/2/2014	<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: <input style="width: 100px;" type="text"/>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
**QEP ENERGY 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:** March 04, 2013  
  
**By:**

<b>NAME (PLEASE PRINT)</b> Valyn Davis	<b>PHONE NUMBER</b> 435 781-4369	<b>TITLE</b> Regulatory Affairs Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 2/28/2013	



**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 43047515030000**

API: 43047515030000

Well Name: OP 16G-3-7-20

Location: 0788 FSL 0863 FEL QTR SESE SEC 03 TWP 070S RNG 200E MER S

Company Permit Issued to: QEP ENERGY COMPANY

Date Original Permit Issued: 3/2/2011

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

Signature: Valyn Davis

Date: 2/28/2013

Title: Regulatory Affairs Analyst Representing: QEP ENERGY COMPANY

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9  5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-14639
<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.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:  7. UNIT or CA AGREEMENT NAME:
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4. LOCATION OF WELL FOOTAGES AT SURFACE: 0788 FSL 0863 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESE Section: 03 Township: 07.0S Range: 20.0E Meridian: S	COUNTY: UINTAH  STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 6/20/2013  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> ACIDIZE <input checked="" 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 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 style="width: 100px;" type="text"/>

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

QEP ENERGY COMPANY REQUESTS TO **CHANGE THE DRILLING PLAN** FOR THE OP 16G-3-7-20. CHANGES TO THE DRILLING PLAN ARE: - RUN 8 5/8" CASING TO 500'. - DRILL 7 7/8" PRODUCTION HOLE, RUN 5 1/2" CASING TO 8,900'. - EXTEND TD TO 8,900' MD. PLEASE SEE ATTACHED: DRILLING PLAN

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

Date: August 09, 2013

By: *Derek Quist*

NAME (PLEASE PRINT) Valyn Davis	PHONE NUMBER 435 781-4369	TITLE Regulatory Affairs Analyst
SIGNATURE N/A	DATE 6/20/2013	

**QEP Energy**  
**OP 16G-3-7-20**  
**Vertical Well**  
**Summarized Procedure**

1. MIRU air rig.
2. Drill 12 1/4" surface hole to 500', run 8 5/8", 32#, HCK-55, LTC, cement to surface.
3. RD air rig, move off location.
4. MIRU drilling rig.
5. NU rig's 3,000 WP rated BOP. Test BOP's and surface casing.
6. PU straight hole BHA, drill out surface casing and 10' of new formation, perform FIT.
7. Drill 7 7/8" hole to ~8,900, TD.
8. Mud system will be water based. Mud weights from 8.6 – 9.5 ppg, Max 10.0 ppg.
9. TOO, LDDP.
10. Log hole.
11. PU and run 5-1/2", 17#, N-80 LTC casing to intermediate TD. Cement same.
12. RDMOL

ONSHORE OIL & GAS ORDER NO. 1  
 QEP ENERGY COMPANY  
 OP 16G-3-7-20

DRILLING PROGRAM  
 ONSHORE OIL & GAS ORDER NO. 1  
 Approval of Operations on Onshore  
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**1. Formation Tops**

The estimated top of important geologic markers are as follows:

<u>Formation</u>	<u>Depth</u>
Green River	4,200'
X Marker	6,429'
G1 Lime	7,123'
H4a	7,351'
Wasatch	7,600'
TD	8,900'

**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:

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
Oil/Gas	Wasatch	7,600'

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.

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ONSHORE OIL & GAS ORDER NO. 1  
 QEP ENERGY COMPANY  
 OP 16G-3-7-20

**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 Program**

Hole Size	Casing Size	Top, MD	Bottom, MD	Weight, lb/ft	Grade	Thread	Condition	MW
17 1/2"	14"	sfc	40'	Steel	Cond.	None	Used	Air
12 1/4"	8 5/8"	sfc	500'	32.0	HCK-55	LTC	New	Air
7 7/8"	5 1/2"	sfc	8,900'	17.0	N-80	LTC	New	8-9 ppg

Casing Strengths:				Collapse	Burst	Tensile (minimum)
8 5/8"	32.0 lb.	HCK-55	LTC	3,740 psi	3,930 psi	452,000 lb.
5-1/2"	17.0 lb.	N-80	LTC	6,290 psi	7,740 psi	348,000 lb.

Please refer to the attached wellbore diagram procedure for further details.

ONSHORE OIL & GAS ORDER NO. 1  
QEP ENERGY COMPANY  
OP 16G-3-7-20

5. **Cementing Program**

**16" Conductor:**

Cement to surface with construction cement.

**8-5/8" Surface Casing: sfc – 500' (MD)**

**Lead/Tail Slurry:** 0' – 500'. 228 sks (413 cu ft) Rockies LT cement + 0.25 lb/sk Kwik Seal + 0.125 lb/sk Poly-E-Flake. Slurry wt: 13.5 ppg, Slurry yield: 1.81 ft<sup>3</sup>/sk, Slurry volume: 12-1/4" hole + 100% excess.

**5-1/2" Production Casing: sfc – 8,900' (MD)**

**Lead:** Sfc – 6,000' 529 sks (1,556 cu ft) Halliburton ECONOCEM V4+ 3 LBM/SK Kol-Seal (LCM) + 0.1% HR-800 (Retarder). Slurry Weight 11 lb/gal, Slurry Yield 2.94 ft<sup>3</sup>/sk, with 50% Excess

**Tail Slurry:** 6,000' – 8,900'. 505 sks (753 cu ft) Halliburton EXPANDACEM V3 + 0.2% HR-800 (Retarder) + 0.125 lbm/sk Poly-E-Flake (LCM) + 1 lbm/sk Granulite TR ¼ (LCm). Slurry wt: 13.5 ppg, Slurry yield: 1.49 ft<sup>3</sup>/sk, with 50% excess.

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
- f. Request For Variance

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 480 feet and high pressures are not expected.

1. **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.

ONSHORE OIL & GAS ORDER NO. 1  
QEP ENERGY COMPANY  
OP 16G-3-7-20

2. **Blooiie line discharge 100 feet from wellbore and securely anchored** – the blooiie 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.
3. **Automatic igniter or continuous pilot light on blooiie line** – a diffuser will be used rather than an automatic pilot/igniter. Water is injected into the compressed air and eliminates the need for a pilot light and the need for dust suppression equipment.
4. **Compressors located in the opposite direction from the blooiie line a minimum of 100 feet from the wellbore** – compressors located within 50 feet on the opposite side of the wellbore from the blooiie line and is equipped with a 1) emergency kill switch on the driller's console, 2) pressure relief valves on the compressors, 3) spark arrestors on the motors.
5. **Kill Fluid to control well** – In lieu of having mud products on location to kill the well for an unanticipated kick, Questar will kill the well with water contained in a 400 bbl tank on site. The 400 bbl water tank will also be storage for surface casing cement water.
6. **Deflector on the end of the blooiie line** – Questar will mount a deflector unit at the end of the blooiie 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 blooiie. A washed out deflector will be easily replaced.
7. **Flare Pit** – there will be no need of a flare pit during the surface hole air drilling operation because the blooiie line is routed directly to the reserve pit. When the big rig arrives for the main drilling after setting surface casing, a flare box will be installed and all flare lines will be routed to the flare box.

Drilling of the laterals will be done with fresh water NaCl based mud systems consisting primarily of fresh water, bentonite, lignite, caustic, lime, soda ash, polymers, and NaCl. 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 10.0 ppg.

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

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

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

ONSHORE OIL & GAS ORDER NO. 1  
QEP ENERGY COMPANY  
OP 16G-3-7-20

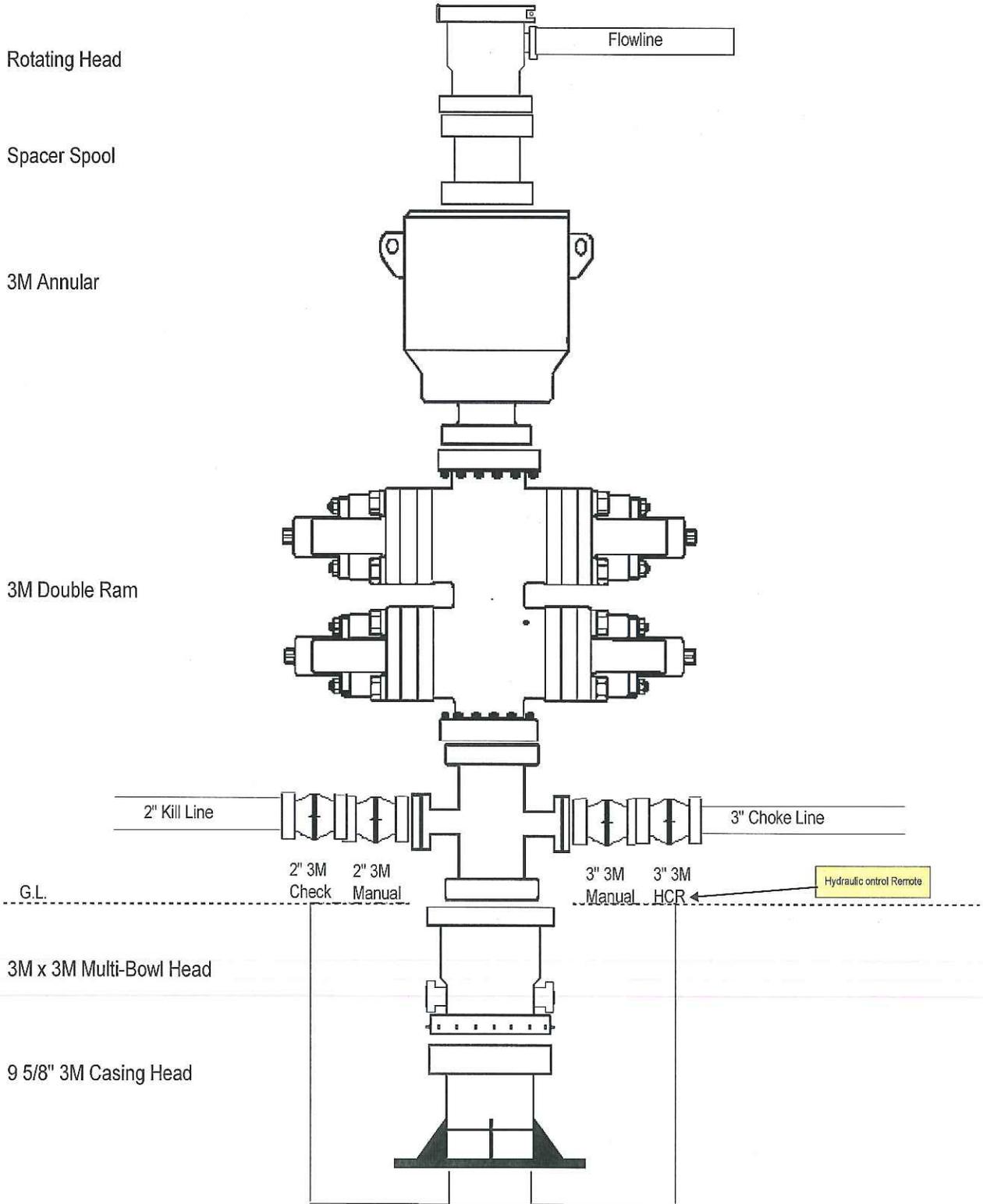
7. **Testing, Logging, and Coring Program**

- a. Cores – None Anticipated
- b. DST – None Anticipated
- c. Logging:
  - i. Mud logging from casing exit to TD
  - ii. Open Hole Logs: Triple Combo in Pilot Hole (GR-SP-CAL-DN-PE)
- d. Formation and completion interval: H4a 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.

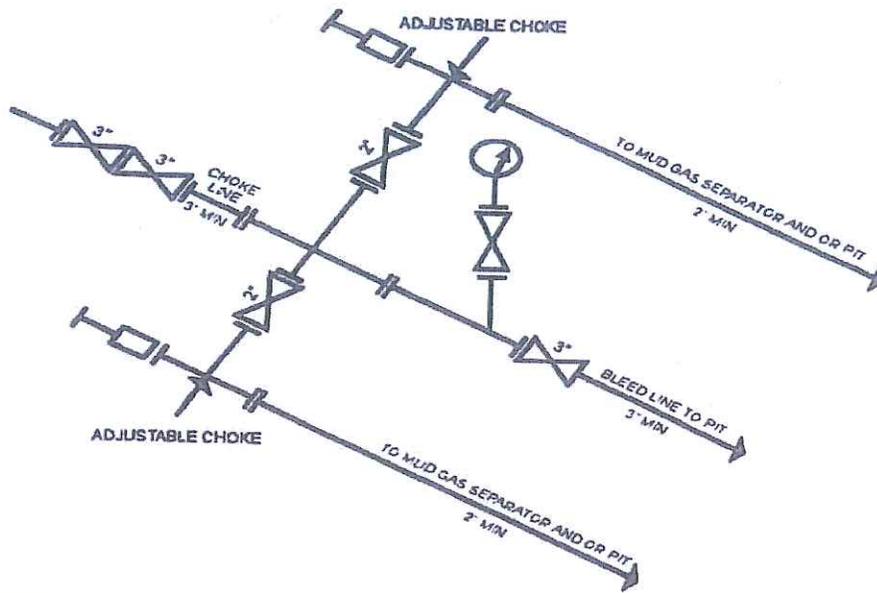
8. **Anticipated Abnormal Pressures and Temperatures, Other Potential Hazards**

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 3,952 psi. Maximum anticipated bottom hole temperature is approximately 150°F.

ONSHORE OIL & GAS ORDER NO. 1  
QEP ENERGY COMPANY  
OP 16G-3-7-20  
3M BOP STACK



ONSHORE OIL & GAS ORDER NO. 1  
QEP ENERGY COMPANY  
OP 16G-3-7-20



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

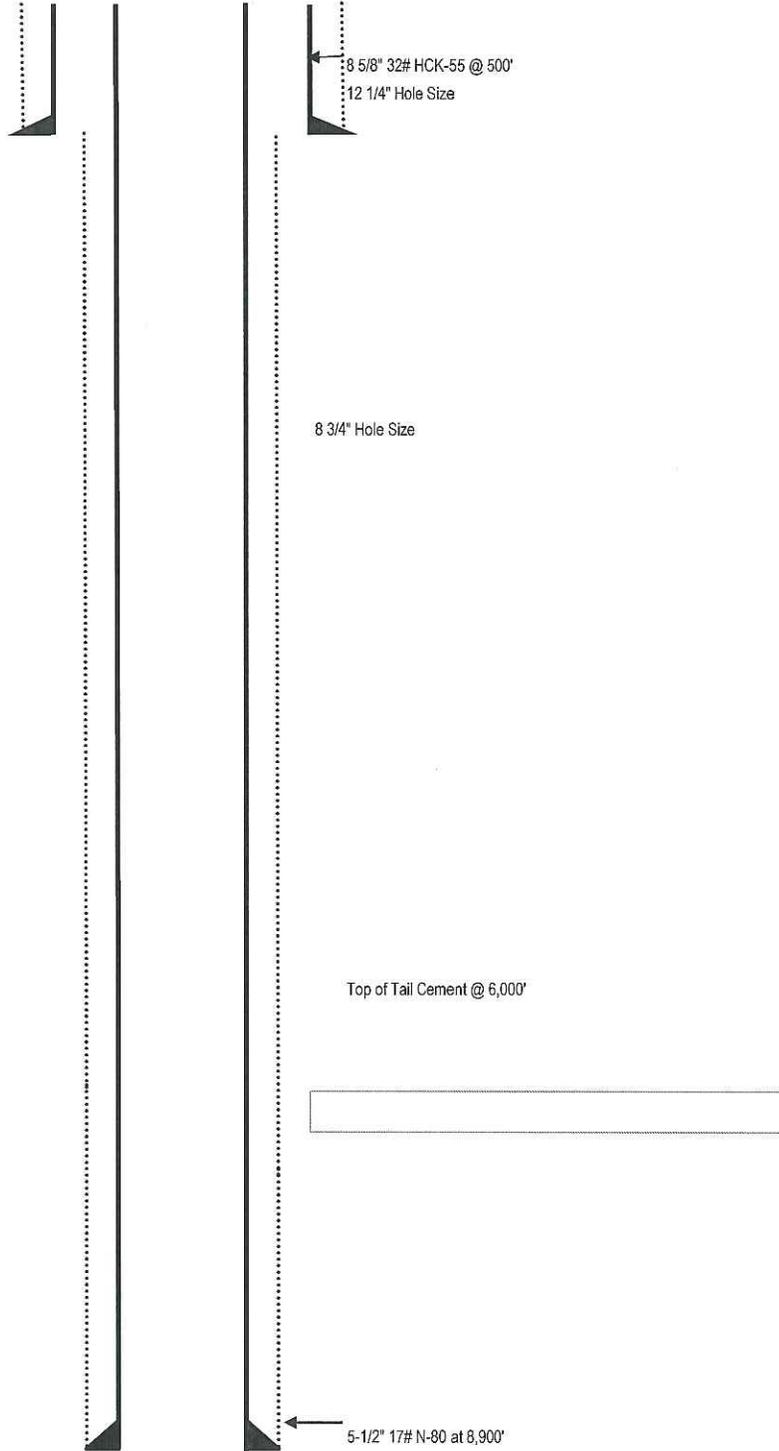
**OP 16G-3-7-20**

Updated 06-19-2013 CRA

Proposed WBD  
Uinta Basin  
Section 3, T7S, R20E, Uintah County

KB 4,881'  
GL 4,865'

NOTE: NOT TO SCALE



<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> UTU-14639	
<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>	
<b>7. UNIT or CA AGREEMENT NAME:</b>	
<b>8. WELL NAME and NUMBER:</b> OP 16G-3-7-20	
<b>9. API NUMBER:</b> 43047515030000	
<b>9. FIELD and POOL or WILDCAT:</b> BRENNAN BOTTOM	
<b>COUNTY:</b> UINTAH	
<b>STATE:</b> UTAH	

**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
<b>2. NAME OF OPERATOR:</b> QEP ENERGY COMPANY
<b>3. ADDRESS OF OPERATOR:</b> 11002 East 17500 South , Vernal, Ut, 84078
<b>PHONE NUMBER:</b> 303 308-3068 Ext
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0788 FSL 0863 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SESE Section: 03 Township: 07.0S Range: 20.0E Meridian: S

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: 3/2/2015	<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: <input style="width: 100px;" type="text"/>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
 QEP ENERGY 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:** March 10, 2014  
**By:**

<b>NAME (PLEASE PRINT)</b> Valyn Davis	<b>PHONE NUMBER</b> 435 781-4369	<b>TITLE</b> Regulatory Affairs Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 3/3/2014	



**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 43047515030000**

API: 43047515030000

Well Name: OP 16G-3-7-20

Location: 0788 FSL 0863 FEL QTR SESE SEC 03 TWP 070S RNG 200E MER S

Company Permit Issued to: QEP ENERGY COMPANY

Date Original Permit Issued: 3/2/2011

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

Signature: Valyn Davis

Date: 3/3/2014

Title: Regulatory Affairs Analyst Representing: QEP ENERGY COMPANY

<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> UTU-14639
		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>1. TYPE OF WELL</b> Oil Well		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>2. NAME OF OPERATOR:</b> QEP ENERGY COMPANY		<b>8. WELL NAME and NUMBER:</b> OP 16G-3-7-20
<b>3. ADDRESS OF OPERATOR:</b> 11002 East 17500 South , Vernal, Ut, 84078		<b>9. API NUMBER:</b> 43047515030000
<b>PHONE NUMBER:</b> 303 308-3068 Ext		<b>9. FIELD and POOL or WILDCAT:</b> BRENNAN BOTTOM
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0788 FSL 0863 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SESE Section: 03 Township: 07.0S Range: 20.0E Meridian: S		<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"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input checked="" type="checkbox"/> SPUD REPORT Date of Spud: 6/11/2014	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT 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
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	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

ON 6/11/2014- QEP ENERGY COMPANY SET 40' OF 14" CONDUCTOR PIPE AND CEMENTED WITH READY MIX.

**Accepted by the  
Utah Division of  
Oil, Gas and Mining**  
**FOR RECORD ONLY**  
June 16, 2014

<b>NAME (PLEASE PRINT)</b> Valyn Davis	<b>PHONE NUMBER</b> 435 781-4369	<b>TITLE</b> Regulatory Affairs Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 6/16/2014	

<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> UTU-14639
<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> OURAY PARK II
<b>1. TYPE OF WELL</b> Oil Well	<b>8. WELL NAME and NUMBER:</b> OP 16G-3-7-20
<b>2. NAME OF OPERATOR:</b> QEP ENERGY COMPANY	<b>9. API NUMBER:</b> 43047515030000
<b>3. ADDRESS OF OPERATOR:</b> 11002 East 17500 South , Vernal, Ut, 84078	<b>PHONE NUMBER:</b> 303 308-3068 Ext
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0788 FSL 0863 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SESE Section: 03 Township: 07.0S Range: 20.0E Meridian: S	<b>9. FIELD and POOL or WILDCAT:</b> BRENNAN BOTTOM  <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: <b>5/27/2014</b>  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> ACIDIZE <input checked="" type="checkbox"/> <b>CHANGE TO PREVIOUS PLANS</b> <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 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 style="width: 100px;" type="text"/>

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

QEP ENERGY COMPANY REQUESTS TO CHANGE THE CASING PLAN FOR THE OP 16G-3-7-20. CHANGES TO THE DRILLING PLAN ARE: -RUN 9 5/8" CASING TO 500'. PLEASE SEE ATTACHED: DRILLING PLAN

**Accepted by the  
 Utah Division of  
 Oil, Gas and Mining  
 FOR RECORD ONLY**  
 June 26, 2014

<b>NAME (PLEASE PRINT)</b> Valyn Davis	<b>PHONE NUMBER</b> 435 781-4369	<b>TITLE</b> Regulatory Affairs Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 5/27/2014	

**QEP Energy**  
**OP 16G-3-7-20**  
**Vertical Well**  
**Summarized Procedure**

---

1. MIRU air rig.
2. Drill 12 ¼" surface hole to 500', run 9 5/8", 36#, J-55, STC, cement to surface.
3. RD air rig, move off location.
4. MIRU drilling rig.
5. NU rig's 3,000 WP rated BOP. Test BOP's and surface casing.
6. PU straight hole BHA, drill out surface casing and 10' of new formation, perform FIT.
7. Drill 7 7/8" hole to ~8,900, TD.
8. Mud system will be water based. Mud weights from 8.6 – 9.5 ppg, Max 10.0 ppg.
9. TOOH, LDDP.
10. Log hole.
11. PU and run 5-1/2", 17#, N-80 LTC casing to intermediate TD. Cement same.
12. RDMOL

ONSHORE OIL & GAS ORDER NO. 1  
 QEP ENERGY COMPANY  
 OP 16G-3-7-20

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:

<u>Formation</u>	<u>Depth</u>
Green River	4,200'
X Marker	6,429'
G1 Lime	7,123'
H4a	7,351'
Wasatch	7,600'
TD	8,900'

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:

<u>Substance</u>	<u>Formation</u>	<u>Depth,</u>
Oil/Gas	X Marker	6,429'
Oil/Gas	G1 Lime	7,123'
Oil/Gas	H4a	7,351'
Oil/Gas	Wasatch	7,600'

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.

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 49-251 (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.

ONSHORE OIL &amp; GAS ORDER NO. 1

QEP ENERGY COMPANY

OP 16G-3-7-20

**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 Program**

Hole Size	Casing Size	Top, MD	Bottom, MD	Weight, lb/ft	Grade	Thread	Condition	MW
17 1/2"	14"	sfc	40'	Steel	Cond.	None	Used	Air
12 1/4"	9 5/8"	sfc	500'	36.0	J-55	STC	New	Air
7 7/8"	5 1/2"	sfc	8,900'	17.0	N-80	LTC	New	8-9 ppg

Casing Strengths:				Collapse	Burst	Tensile (minimum)
9-5/8"	36.0 lb.	J-55	STC	2,020 psi	3,520 psi	394,000 lb.
5-1/2"	17.0 lb.	N-80	LTC	6,290 psi	7,740 psi	348,000 lb.

Please refer to the attached wellbore diagram procedure for further details.

ONSHORE OIL & GAS ORDER NO. 1  
QEP ENERGY COMPANY  
OP 16G-3-7-20

5. **Cementing Program**

**16" Conductor:**

Cement to surface with construction cement.

**9-5/8" Surface Casing: SFC – 500' (MD)**

**Tail Slurry:** SFC – 1,000'. 350 sks (400 cu ft) Class G + 2% CaCl + 0.25 lb/sk Flocele. Slurry wt: 15.8 ppg, Slurry yield: 1.15 ft<sup>3</sup>/sk, Slurry volume: 12-1/4" to TD with 150% excess.

**5-1/2" Production Casing: sfc – 8,900' (MD)**

**Lead:** Sfc – 6,000' 529 sks (1,556 cu ft) Halliburton ECONOCEM V4+ 3 LBM/SK Kol-Seal (LCM) + 0.1% HR-800 (Retarder). Slurry Weight 11 lb/gal, Slurry Yield 2.94 ft<sup>3</sup>/sk, with 50% Excess

**Tail Slurry:** 6,000' – 8,900'. 505 sks (753 cu ft) Halliburton EXPANDACEM V3 + 0.2% HR-800 (Retarder) + 0.125 lbm/sk Poly-E-Flake (LCM) + 1 lbm/sk Granulite TR ¼ (LCM). Slurry wt: 13.5 ppg, Slurry yield: 1.49 ft<sup>3</sup>/sk, with 50% excess.

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
- f. Request For Variance

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 480 feet and high pressures are not expected.

1. **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.

ONSHORE OIL & GAS ORDER NO. 1  
QEP ENERGY COMPANY  
OP 16G-3-7-20

2. **Blooi line discharge 100 feet from wellbore and securely anchored** – the blooi 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.
3. **Automatic igniter or continuous pilot light on blooi line** – a diffuser will be used rather than an automatic pilot/igniter. Water is injected into the compressed air and eliminates the need for a pilot light and the need for dust suppression equipment.
4. **Compressors located in the opposite direction from the blooi line a minimum of 100 feet from the wellbore** – compressors located within 50 feet on the opposite side of the wellbore from the blooi line and is equipped with a 1) emergency kill switch on the driller's console, 2) pressure relief valves on the compressors, 3) spark arrestors on the motors.
5. **Kill Fluid to control well** – In lieu of having mud products on location to kill the well for an unanticipated kick, Questar will kill the well with water contained in a 400 bbl tank on site. The 400 bbl water tank will also be storage for surface casing cement water.
6. **Deflector on the end of the blooi line** – Questar will mount a deflector unit at the end of the blooi 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 blooi. A washed out deflector will be easily replaced.
7. **Flare Pit** – there will be no need of a flare pit during the surface hole air drilling operation because the blooi line is routed directly to the reserve pit. When the big rig arrives for the main drilling after setting surface casing, a flare box will be installed and all flare lines will be routed to the flare box.

Drilling of the laterals will be done with fresh water NaCl based mud systems consisting primarily of fresh water, bentonite, lignite, caustic, lime, soda ash, polymers, and NaCl. 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 10.0 ppg.

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

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

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

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

- a. Cores – None Anticipated
- b. DST – None Anticipated

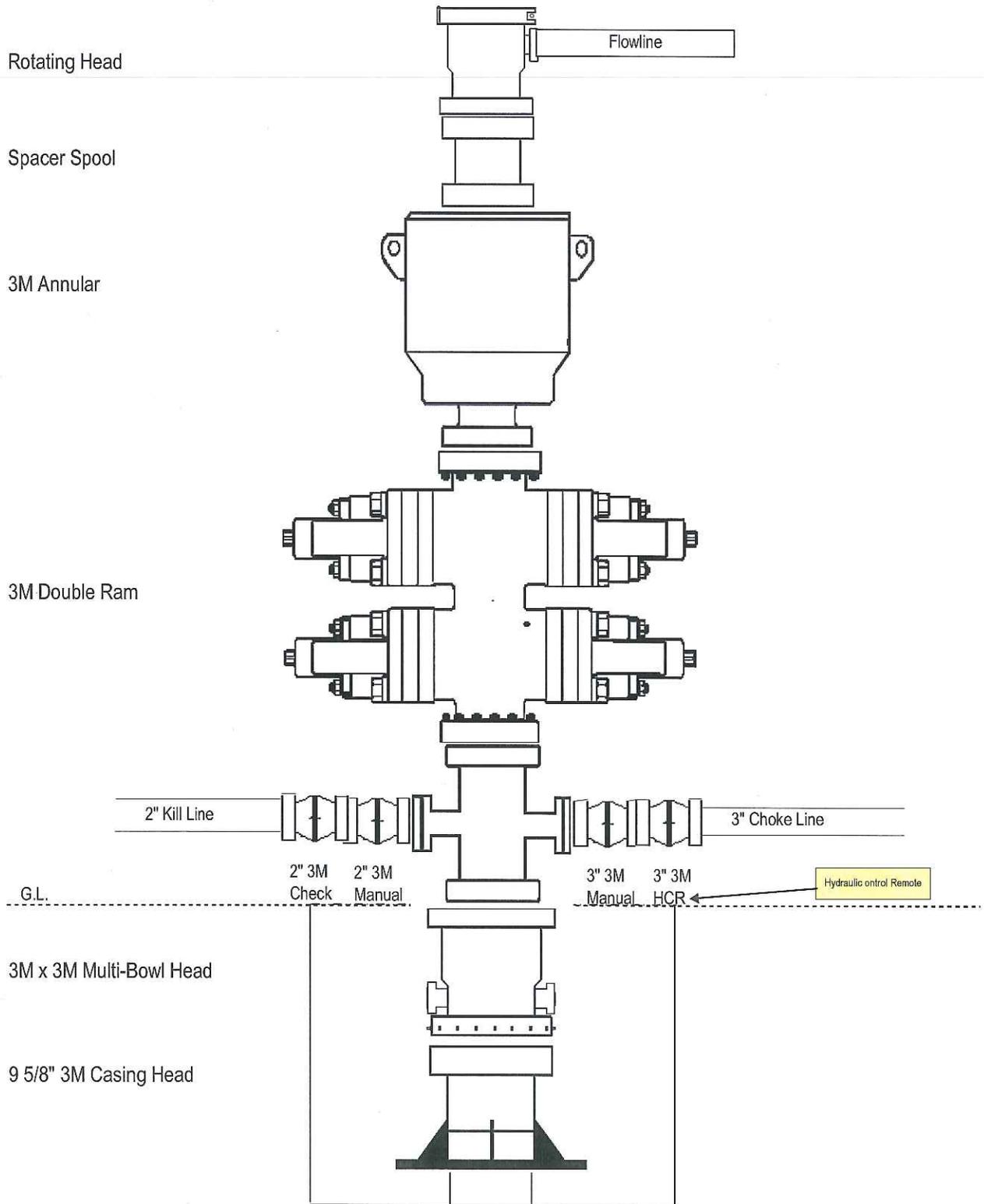
ONSHORE OIL & GAS ORDER NO. 1  
QEP ENERGY COMPANY  
OP 16G-3-7-20

- c. Logging:
  - i. Mud logging from casing exit to TD
  - ii. Open Hole Logs: Triple Combo in Pilot Hole (GR-SP-CAL-DN-PE)
- d. Formation and completion interval: H4a 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.

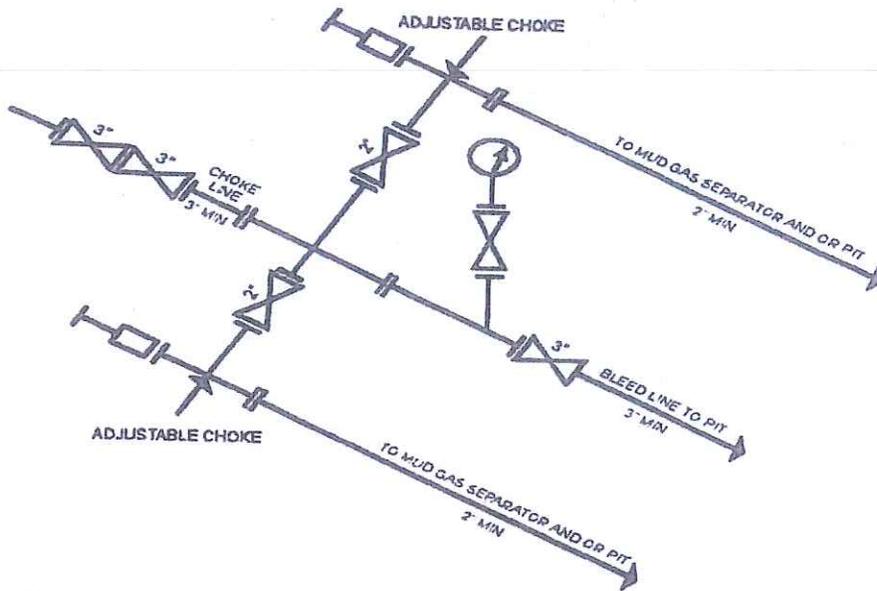
**8. Anticipated Abnormal Pressures and Temperatures, Other Potential Hazards**

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 3,952 psi. Maximum anticipated bottom hole temperature is approximately 150°F.

ONSHORE OIL & GAS ORDER NO. 1  
QEP ENERGY COMPANY  
OP 16G-3-7-20  
3M BOP STACK



ONSHORE OIL & GAS ORDER NO. 1  
QEP ENERGY COMPANY  
OP 16G-3-7-20



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

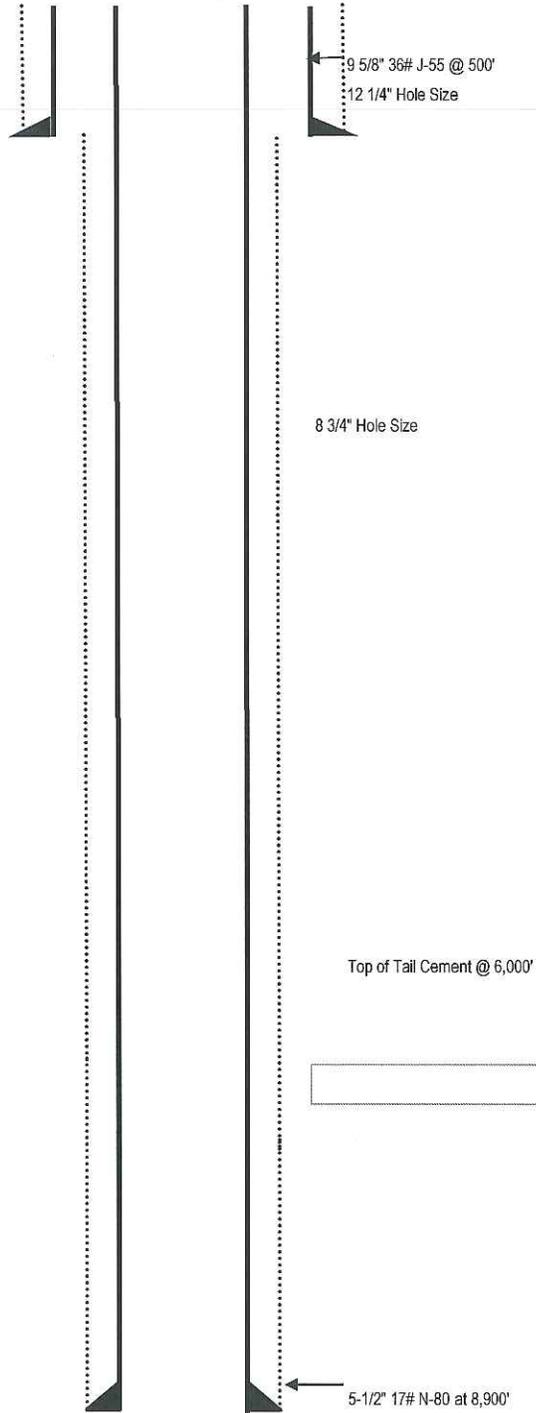
**OP 16G-3-7-20**

Updated 05-14-2014 CRA

Proposed WBD  
Uinta Basin  
Section 3, T7S, R20E, Uintah County

KB 4,881'  
GL 4,865'

NOTE: NOT TO SCALE



BLM - Vernal Field Office - Notification Form

Operator QEP ENERGY Rig Name/# Pete Martin #1  
Submitted By DAVE HARDING Phone Number 435 828-0396  
Well Name/Number OP 16G-3-7-20  
Qtr/Qtr SE/SE Section 3 Township 7S Range 20E  
Lease Serial Number UTU14639  
API Number 43-047-51503

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time 6/11/2014 8:00 AM  PM

Casing – Please report time casing run starts, not cementing times.

- Surface Casing
- Intermediate Casing
- Production Casing
- Liner
- Other

Date/Time \_\_\_\_\_ AM  PM

BOPE

- Initial BOPE test at surface casing point
- BOPE test at intermediate casing point
- 30 day BOPE test
- Other

Date/Time \_\_\_\_\_ AM  PM

Remarks Pete Martin Drilling to set 40 ft of 14" conductor

BLM - Vernal Field Office - Notification Form

Operator OEP ENERGY Rig Name/# SST RIG 8  
\_Submitted By MURRAY BECKER Phone Number 435 828-0394

Well Name/Number OP 16G-3-7-20

Qtr/Qtr SE/SE Section 3 Township 7S Range 20E

Lease Serial Number UTU14639

API Number 43-047-51503

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time 6/11/2014 8:00 AM  PM

Casing – Please report time casing run starts, not cementing times.

- Surface Casing
- Intermediate Casing
- Production Casing
- Liner
- Other

Date/Time \_\_\_\_\_ AM  PM

BOPE

- Initial BOPE test at surface casing point
- BOPE test at intermediate casing point
- 30 day BOPE test
- Other

Date/Time \_\_\_\_\_ AM  PM

Remarks WE SHOULD START TO DRILL OUT FROM  
UNDER CONDUCTOR ON 7/6/14 AT ABOUT 08:00 AM.

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CONFIDENTIAL

BLM - Vernal Field Office - Notification Form

Operator QEP ENERGY Rig Name/# SST RIG 8 Submitted  
By MURRAY BECKER Phone Number 435-828-0394  
Well Name/Number OP 16G-3-7-20  
Qtr/Qtr ~~NW/NW~~ Section 2 Township 7S Range 20E SEC 3 SE/SE  
Lease Serial Number UTU 14639  
API Number 43-047-51503

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time 6/11/14 @ 8:00 \_\_\_\_\_ AM  PM

Casing – Please report time casing run starts, not cementing times.

- Surface Casing
- Intermediate Casing
- Production Casing
- Liner
- Other

Date/Time 7/7/14 @ 05.30 \_\_\_\_\_ AM  PM

BOPE

- Initial BOPE test at surface casing point
- BOPE test at intermediate casing point
- 30 day BOPE test
- Other

Date/Time 7/7/14 @ 10:30 \_\_\_\_\_ AM  PM

Remarks THIS IS AN EST. OF WHEN WE WILL BE RUNNING  
9 5/8 SURFACE PIPE AND DOING 3000# BOP TEST. IF ANY  
QUESTIONS CALL 1-435-828-2394

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STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-14639
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> OURAY PARK II
<b>1. TYPE OF WELL</b> Oil Well	<b>8. WELL NAME and NUMBER:</b> OP 16G-3-7-20	
<b>2. NAME OF OPERATOR:</b> QEP ENERGY COMPANY	<b>9. API NUMBER:</b> 43047515030000	
<b>3. ADDRESS OF OPERATOR:</b> 11002 East 17500 South , Vernal, Ut, 84078	<b>PHONE NUMBER:</b> 303 308-3068 Ext	<b>9. FIELD and POOL or WILDCAT:</b> BRENNAN BOTTOM
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0788 FSL 0863 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SESE Section: 03 Township: 07.0S Range: 20.0E Meridian: S	<b>COUNTY:</b> UINTAH	
	<b>STATE:</b> UTAH	
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:  <input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 8/8/2014  <input type="checkbox"/> SPUD REPORT Date of Spud:  <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> CONVERT WELL TYPE <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 checked="" 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 type="checkbox"/> WILDCAT WELL DETERMINATION <input type="checkbox"/> OTHER	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. <b>THIS WELL COMMENCED PRODUCTION ON AUGUST 8, 2014 @ 9:00 P.M.</b>		
		<b>Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY August 11, 2014</b>
<b>NAME (PLEASE PRINT)</b> Valyn Davis	<b>PHONE NUMBER</b> 435 781-4369	<b>TITLE</b> Regulatory Affairs Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 8/11/2014	

**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**

1a. TYPE OF WELL: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> OTHER _____		7. UNIT or CA AGREEMENT NAME <b>OURAY PARK II</b>	
b. TYPE OF WORK: NEW WELL <input checked="" type="checkbox"/> HORIZ. LATS. <input type="checkbox"/> DEEP-EN <input type="checkbox"/> RE-ENTRY <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> OTHER _____		8. WELL NAME and NUMBER: <b>OP 16G-3-7-20</b>	
2. NAME OF OPERATOR: <b>QEP ENERGY COMPANY</b>		9. API NUMBER: <b>4304751503</b>	
3. ADDRESS OF OPERATOR: <b>11002 E. 17500 S. CITY VERNAL STATE UT ZIP 84078</b>		PHONE NUMBER: <b>(435) 781-4320</b>	
4. LOCATION OF WELL (FOOTAGES) AT SURFACE: <b>788' FSL, 863' FEL</b>  AT TOP PRODUCING INTERVAL REPORTED BELOW: <b>788' FSL, 863' FEL</b>  AT TOTAL DEPTH: <b>788' FSL, 863' FEL</b>		10 FIELD AND POOL, OR WILDCAT <b>BRENNAN BOTTOM</b>	
14. DATE SPUDDED: <b>6/11/2014</b>		15. DATE T.D. REACHED: <b>7/14/2014</b>	
16. DATE COMPLETED: <b>8/8/2014</b>		ABANDONED <input type="checkbox"/> READY TO PRODUCE <input checked="" type="checkbox"/>	
17. ELEVATIONS (DF, RKB, RT, GL): <b>4865' GL</b>		11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>SESE 3 7S 20E</b>	
18. TOTAL DEPTH: MD <b>8,862</b> TVD <b>8,860</b>		19. PLUG BACK T.D.: MD _____ 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) <b>PEX, CBL</b>		23. WAS WELL CORED? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit analysis) WAS DST RUN? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit report) DIRECTIONAL SURVEY? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (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
12.25	9.625 J55	36	0	1,615		565	229		
7.875	5.5 P11	17	0	8,844		1,388	491	1880	

**25. TUBING RECORD**

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
2.875	8,429							

**26. PRODUCING INTERVALS**

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)
(A) GREEN RIVER	6,111	8,259		
(B)				
(C)				
(D)				

**27. PERFORATION RECORD**

INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
6,111 8,259	.42	258	Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
			Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
			Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
			Open <input type="checkbox"/> Squeezed <input type="checkbox"/>

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

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
6,111 - 8,259	13,612 BBLS DELTA 140 AND FRESHWATER; 1,000,540 LBS 20/40 SAND

**29. ENCLOSED ATTACHMENTS:**

- ELECTRICAL/MECHANICAL LOGS     
  GEOLOGIC REPORT     
  DST REPORT     
  DIRECTIONAL SURVEY  
 SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION     
  CORE ANALYSIS     
  OTHER: OP SUMMARY

**30. WELL STATUS:**

**POW**

31. INITIAL PRODUCTION

INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED: 8/8/2014		TEST DATE: 8/15/2014		HOURS TESTED: 24		TEST PRODUCTION RATES: →	OIL - BBL: 241	GAS - MCF: 16	WATER - BBL: 175	PROD. METHOD: GPU
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL - BBL: 241	GAS - MCF: 16	WATER - BBL: 175	INTERVAL STATUS:

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.)

USED ON LEASE

33. SUMMARY OF POROUS ZONES (Include Aquifers):

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

34. FORMATION (Log) MARKERS:

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
				GREEN RIVER	4,014
				MAHOGANY MARKER	5,296
				WASATCH	7,379

35. ADDITIONAL REMARKS (Include plugging procedure)

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

NAME (PLEASE PRINT) BENNA MUTH TITLE REGULATORY ASSISTANT - CONTRACTOR  
 SIGNATURE *Benna Muth* DATE 8/25/2014

This report must be submitted within 30 days of

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

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

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

Send to: Utah Division of Oil, Gas and Mining Phone: 801-538-5340  
 1594 West North Temple, Suite 1210  
 Box 145801 Fax: 801-359-3940  
 Salt Lake City, Utah 84114-5801



QEP Energy Company

## Daily Activity and Cost Summary

Well Name: OP 16G-3-7-20

API 43-047-51503	Surface Legal Location S3-T7S-R20E	Field Name BRENNAN BOTTOM	County UINTAH	State UTAH	Well Configuration Type Vertical
Unique Well ID UT102941	Ground Elevation (ft) 4,956.2	Casing Flange Elevation (ft) 4,956.20	Current KB to GL (ft) 22.60	KB to CF (ft) 22.60	Spud Date 6/11/2014 08:00
Job Category DRILLING	Primary Job Type AFE - DRL-DR (Drilling)	Secondary Job Type	Objective		
Start Date 7/3/2014	Job End Date 7/23/2014				

Purpose

Summary

Contractor SST Energy	RIG SST 8	Rig Type TOP DRIVE
--------------------------	--------------	-----------------------

RPT #	Start Date	Summary
1	7/3/2014	RIG DOWN RIG, LAY OUT TOP DRIVE, LAY OVER DERRICK, RIG DOWN BY HAND
2	7/4/2014	MOVE RIG AND SET IN RIG UP
3	7/5/2014	RIG UP W/ TRUCKS AND CRANE TO 13:30 7/5/14, RIG UP, RAISE A-LEGS, PIN STABBING BOARD, SET DERRICK ON STAND, SPOOL LINE, RAISE DERRICK, PICK UP TOP DRIVE UP. SET IN AND RIG UP MUD CLEANER.
4	7/6/2014	WELD ON CONDUCTOR, PICK UP BHA. PICK UP 8" BHA., DIRECTIONAL DRILL 12.25 HOLE, SURVEY
5	7/7/2014	SHORT TRIP, CIRC., TRIP, RU CASERS, RUN 9 5/8 CASING, CEMENT, WAIT ON CEMENT, CUT CASING AND WELD ON WELL CASING HEAD AT GL, NIPPLE UP BOP AND TEST.
6	7/8/2014	TEST BOPE, PICK UP BHA, TRIP IN, DRILL SHOE TRACK, FIT TO 10.6 EMW, REPAIR TOP DRIVE LUBE PUMP, DIRECTIONAL DRILL AND SURVEY
7	7/9/2014	DIRECTIONAL DRILL & SURVEY 2674-4451. SERVICE RIG.
8	7/10/2014	DIRECTIONAL DRILL & SURVEY 4451-5642. SERVICE RIG.
9	7/11/2014	DIRECTIONAL DRILL & SURVEY 5642-6925. SERVICE RIG.
10	7/12/2014	DRILL 6925-6988. CIRCULATE BTMS UP. TRIP OUT. WORK TIGHT HOLE 4175-4150. CHANGE BIT. TRIP IN HOLE. WASH TIGHT HOLE @ 3100 & 4200. DRILL & SURVEY 6988-7653. TROUBLE SHOOT MWD. DRILL 7653-7749.
11	7/13/2014	DRILL & SURVEY 6988-7844. MWD FAILURE. TRIP OUT. BACK REAM THRU TIGHT SPOTS @ 7300, 7200 & 4200. CHANGE OUT MWD, MOTOR & UBHO SUB. TRIP IN HOLE. TROUBLE SHOOT MWD. WASH & REAM 7664-7844. DRILL & SURVEY 7844-8035.
12	7/14/2014	DRILL & SURVEY WHEN POSSIBLE. 8035-8862 TD. SERVICE RIG. CIRCULATE FOR WIPER TRIP.
13	7/15/2014	WIPER TRIP OUT (SLM). BACK REAM 4180-4120. L/D BIT, MTR & UBHO. P/U BIT & BIT SUB. TRIP IN. WASH & REAM ALL TIGHT SPOTS F/ 4100-TD. CIRCULATE FOR LOGS. DROP SURVEY. TRIP OUT FOR LOGS.
14	7/16/2014	TRIP OUT FOR LOGS. L/D MONELS & STABILIZER. PJSM. RIG UP SCHLUMBERGER. E-LOG. TRIP IN FOR CLEAN OUT. CIRCULATE. TRIP OUT. PJSM. RIG UP & RUN SIDE WALL CORES. BRIDGED OFF @ 2840. TRIP IN FOR CLEAN OUT. WASH & REAM 2400-3500.
15	7/17/2014	WASH & REAM TIGHT SPOTS & LOSS ZONES 3500-8862. CIRCULATE. TRIP OUT FOR SIDE WALL CORES. PJSM. RIG UP & ATTEMPT SIDE WALL CORE #2.
16	7/18/2014	RIG DOWN SCHLUMBERGER. SERVICE RIG. TRIP IN HOLE TO SHOE. CUT DRLG LINE. TRIP IN & WASH TIGHT SPOTS TO 8862. CIRCULATE. PJSM. PUMP OUT 12 STDS. RIG UP L/D TRUCK. PJSM. LAY DOWN DRILL STRING. PULL WEAR BUSHING. PJSM. RIG UP CASING CREW. RUN PRODUCTION CASING.
17	7/19/2014	RUN 5.5" PRODUCTION CASING TO 6791. WORK CASING. NO PROGRESS. LAY DOWN CASING. RIG DOWN CASING CREW. LAY OUT BHA.
18	7/20/2014	P/U DRILL STRING. CLEAN HOLE FOR CASING. WASH & REAM 6517-8862. CIRCULATE & CONDITION.
19	7/21/2014	CIRCULATE. WIPER TRIP TO 1615. SERVICE RIG. CIRCULATE. PUMP OUT STDS TO 7700. TRIP OUT FOR CASING.
20	7/22/2014	PJSM. RUN 5.5" PRODUCTION CASING. CIRCULATE CASING. WAIT ON HALLIBURTON TO CHANGE OUT PUMP TRUCK. CEMENT CASING. PULL LANDING JT & PACK OFF. LDDP OUT OF DERRICK.
21	7/23/2014	LAY DOWN DRILL PIPE OUT OF DERRICK, NIPPLE DOWN BOP, CLEAN MUD TANKS



QEP Energy Company

### Perforations

Well Name: OP 16G-3-7-20

API 43-047-51503	Surface Legal Location S3-T7S-R20E	Field Name BRENNAN BOTTOM	County UINTAH	State UTAH	Well Configuration Type Vertical
Unique Well ID UT102941	Gr Elev (ft) 4,956.2	Current Elevation 4,978.80, SST 8 - KB 22.58	KB to CF (ft) 22.60	Spud Date 6/11/2014 08:00	Final Drig Rig Release 7/23/2014 18:00
Total Depth (All) (ft, KB) Original Hole - 8,862.0					

Vertical - Original Hole, 8/18/2014 9:15:58 AM		Perforations			
	Date 8/5/2014		Completion		Top Depth (ft, KB) 6,111.0
	Bottom Depth (ft, KB) 6,112.0		Perforation Company Cutters		Conveyance Method Wireline
	Gun Size (in) 3 1/8		Carrier Make		
	Shot Density (shots/ft) 3.0		Charge Type		Phasing (°) 120
	Orientation		Orientation Method		
	Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)
	Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB		Calculated Shot Total		4
	Perforation Statuses				
	Date	Status	Com		
	Date 8/5/2014		Completion		Top Depth (ft, KB) 6,118.0
	Bottom Depth (ft, KB) 6,119.0		Perforation Company Cutters		Conveyance Method Wireline
	Gun Size (in) 3 1/8		Carrier Make		
	Shot Density (shots/ft) 3.0		Charge Type		Phasing (°) 120
	Orientation		Orientation Method		
	Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)
	Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB		Calculated Shot Total		4
	Perforation Statuses				
	Date	Status	Com		
	Date 8/5/2014		Completion		Top Depth (ft, KB) 6,128.0
	Bottom Depth (ft, KB) 6,129.0		Perforation Company Cutters		Conveyance Method Wireline
	Gun Size (in) 3 1/8		Carrier Make		
	Shot Density (shots/ft) 3.0		Charge Type		Phasing (°) 120
	Orientation		Orientation Method		
	Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)
	Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB		Calculated Shot Total		4
	Perforation Statuses				
	Date	Status	Com		
	Date 8/5/2014		Completion		Top Depth (ft, KB) 6,174.0
	Bottom Depth (ft, KB) 6,175.0		Perforation Company Cutters		Conveyance Method Wireline
	Gun Size (in) 3 1/8		Carrier Make		
	Shot Density (shots/ft) 3.0		Charge Type		Phasing (°) 120
	Orientation		Orientation Method		
	Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)
	Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB		Calculated Shot Total		4
	Perforation Statuses				
	Date	Status	Com		



QEP Energy Company

### Perforations

Well Name: OP 16G-3-7-20

API 43-047-51503		Surface Legal Location S3-T7S-R20E		Field Name BRENNAN BOTTOM		County UINTAH		State UTAH		Well Configuration Type Vertical	
Unique Well ID UT102941		Gr Elev (ft) 4,956.2		Current Elevation 4,978.80, SST 8 - KB 22.58		KB to CF (ft) 22.60		Spud Date 6/11/2014 08:00		Final Drig Rig Release 7/23/2014 18:00	
Total Depth (All) (ft, KB) Original Hole - 8,862.0											
Vertical - Original Hole, 8/18/2014 9:15:58 AM											
Vertical schematic (actual)											
Perforation Statuses											
Date		Status				Com					
8/5/2014		Completion				Top Depth (ft, KB) 6,197.0		Bottom Depth (ft, KB) 6,198.0			
Perforation Company Cutters		Conveyance Method Wireline				Gun Size (in) 3 1/8		Carrier Make			
Shot Density (shots/ft) 3.0		Charge Type				Phasing (°)		120			
Orientation						Orientation Method					
Over/Under Balanced		P Over/Under (psi)		FL MD Before (ft, KB)		FL MD After (ft, KB)		P Surf Init (psi)		P Final Surf (psi)	
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB											
Calculated Shot Total 4											
Perforation Statuses											
Date		Status				Com					
8/5/2014		Completion				Top Depth (ft, KB) 6,205.0		Bottom Depth (ft, KB) 6,206.0			
Perforation Company Cutters		Conveyance Method Wireline				Gun Size (in) 3 1/8		Carrier Make			
Shot Density (shots/ft) 3.0		Charge Type				Phasing (°)		120			
Orientation						Orientation Method					
Over/Under Balanced		P Over/Under (psi)		FL MD Before (ft, KB)		FL MD After (ft, KB)		P Surf Init (psi)		P Final Surf (psi)	
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB											
Calculated Shot Total 4											
Perforation Statuses											
Date		Status				Com					
8/5/2014		Completion				Top Depth (ft, KB) 6,227.0		Bottom Depth (ft, KB) 6,228.0			
Perforation Company Cutters		Conveyance Method Wireline				Gun Size (in) 3 1/8		Carrier Make			
Shot Density (shots/ft) 3.0		Charge Type				Phasing (°)		120			
Orientation						Orientation Method					
Over/Under Balanced		P Over/Under (psi)		FL MD Before (ft, KB)		FL MD After (ft, KB)		P Surf Init (psi)		P Final Surf (psi)	
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB											
Calculated Shot Total 4											
Perforation Statuses											
Date		Status				Com					
8/5/2014		Completion				Top Depth (ft, KB) 6,247.0		Bottom Depth (ft, KB) 6,248.0			
Perforation Company Cutters		Conveyance Method Wireline				Gun Size (in) 3 1/8		Carrier Make			
Shot Density (shots/ft) 3.0		Charge Type				Phasing (°)		120			
Orientation						Orientation Method					
Over/Under Balanced		P Over/Under (psi)		FL MD Before (ft, KB)		FL MD After (ft, KB)		P Surf Init (psi)		P Final Surf (psi)	
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB											
Calculated Shot Total 4											



QEP Energy Company

### Perforations

Well Name: **OP 16G-3-7-20**

API 43-047-51503	Surface Legal Location S3-T7S-R20E	Field Name BRENNAN BOTTOM	County UINTAH	State UTAH	Well Configuration Type Vertical
Unique Well ID UT102941	Gr Elev (ft) 4,956.2	Current Elevation 4,978.80, SST 8 - KB 22.58	KB to CF (ft) 22.60	Spud Date 6/11/2014 08:00	Final Drig Rig Release 7/23/2014 18:00
Vertical - Original Hole, 8/18/2014 9:15:58 AM			Total Depth (All) (ft, KB) Original Hole - 8,862.0		

Vertical schematic (actual)		Perforation Statuses			
Date	Status	Com			
8/5/2014	Completion	Top Depth (ft, KB)	6,268.0	Bottom Depth (ft, KB)	6,269.0
Perforation Company	Cutters	Conveyance Method	Wireline	Gun Size (in)	3 1/8
Shot Density (shots/ft)	3.0	Charge Type		Phasing (°)	120
Orientation		Orientation Method			
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB					
Calculated Shot Total					
4					
8/5/2014	Completion	Top Depth (ft, KB)	6,307.0	Bottom Depth (ft, KB)	6,308.0
Perforation Company	Cutters	Conveyance Method	Wireline	Gun Size (in)	3 1/8
Shot Density (shots/ft)	3.0	Charge Type		Phasing (°)	120
Orientation		Orientation Method			
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB					
Calculated Shot Total					
4					
8/5/2014	Completion	Top Depth (ft, KB)	6,318.0	Bottom Depth (ft, KB)	6,319.0
Perforation Company	Cutters	Conveyance Method	Wireline	Gun Size (in)	3 1/8
Shot Density (shots/ft)	3.0	Charge Type		Phasing (°)	120
Orientation		Orientation Method			
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB					
Calculated Shot Total					
4					
8/5/2014	Completion	Top Depth (ft, KB)	6,355.0	Bottom Depth (ft, KB)	6,356.0
Perforation Company	Cutters	Conveyance Method	Wireline	Gun Size (in)	3 1/8
Shot Density (shots/ft)	3.0	Charge Type		Phasing (°)	120
Orientation		Orientation Method			
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB					
Calculated Shot Total					
4					



QEP Energy Company

### Perforations

Well Name: OP 16G-3-7-20

API		Surface Legal Location		Field Name		County		State		Well Configuration Type							
43-047-51503		S3-T7S-R20E		BRENNAN BOTTOM		UINTAH		UTAH		Vertical							
Unique Well ID		Gr Elev (ft)		Current Elevation		KB to CF (ft)		Spud Date		Final Drig Rig Release							
UT102941		4,956.2		4,978.80, SST 8 - KB 22.58		22.60		6/11/2014 08:00		7/23/2014 18:00							
Vertical - Original Hole, 8/18/2014 9:15:59 AM						Perforation Statuses											
						Date		Status		Com							
						8/5/2014		Completion									
						Perforation Company		Conveyance Method		Top Depth (ft, KB)		Bottom Depth (ft, KB)					
						Cutters		Wireline		6,388.0		6,389.0					
						Shot Density (shots/ft)		Charge Type		Gun Size (in)		Carrier Make					
						3.0				3 1/8							
						Orientation		Orientation Method		Phasing (°)		120					
						Over/Under Balanced		P Over/Under (psi)		FL MD Before (ft, KB)		FL MD After (ft, KB)		P Surf Init (psi)		P Final Surf (psi)	
						Reference Log		SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB									
						Calculated Shot Total		4									
						Perforation Statuses						Perforation Statuses					
						Date		Status		Com		Date		Status		Com	
						8/5/2014		Completion				8/5/2014		Completion			
						Perforation Company		Conveyance Method		Top Depth (ft, KB)		Perforation Company		Conveyance Method		Top Depth (ft, KB)	
						Cutters		Wireline		6,394.0		Cutters		Wireline		6,394.0	
Shot Density (shots/ft)		Charge Type		Gun Size (in)		Shot Density (shots/ft)		Charge Type		Gun Size (in)							
3.0				3 1/8		3.0				3 1/8							
Orientation		Orientation Method		Phasing (°)		Orientation		Orientation Method		Phasing (°)							
Over/Under Balanced		P Over/Under (psi)		FL MD Before (ft, KB)		Over/Under Balanced		P Over/Under (psi)		FL MD Before (ft, KB)							
Reference Log		SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB															
Calculated Shot Total		4															
Perforation Statuses						Perforation Statuses											
Date		Status		Com		Date		Status		Com							
8/4/2014		Completion				8/4/2014		Completion									
Perforation Company		Conveyance Method		Top Depth (ft, KB)		Perforation Company		Conveyance Method		Top Depth (ft, KB)							
Cutters		Wireline		6,404.0		Cutters		Wireline		6,404.0							
Shot Density (shots/ft)		Charge Type		Gun Size (in)		Shot Density (shots/ft)		Charge Type		Gun Size (in)							
3.0				3 1/8		3.0				3 1/8							
Orientation		Orientation Method		Phasing (°)		Orientation		Orientation Method		Phasing (°)							
Over/Under Balanced		P Over/Under (psi)		FL MD Before (ft, KB)		Over/Under Balanced		P Over/Under (psi)		FL MD Before (ft, KB)							
Reference Log		SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB															
Calculated Shot Total		4															
Perforation Statuses						Perforation Statuses											
Date		Status		Com		Date		Status		Com							
8/5/2014		Completion				8/5/2014		Completion									
Perforation Company		Conveyance Method		Top Depth (ft, KB)		Perforation Company		Conveyance Method		Top Depth (ft, KB)							
Cutters		Wireline		6,414.0		Cutters		Wireline		6,414.0							
Shot Density (shots/ft)		Charge Type		Gun Size (in)		Shot Density (shots/ft)		Charge Type		Gun Size (in)							
3.0				3 1/8		3.0				3 1/8							
Orientation		Orientation Method		Phasing (°)		Orientation		Orientation Method		Phasing (°)							
Over/Under Balanced		P Over/Under (psi)		FL MD Before (ft, KB)		Over/Under Balanced		P Over/Under (psi)		FL MD Before (ft, KB)							
Reference Log		SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB															
Calculated Shot Total		4															



QEP Energy Company

### Perforations

Well Name: OP 16G-3-7-20

API 43-047-51503	Surface Legal Location S3-T7S-R20E	Field Name BRENNAN BOTTOM	County UINTAH	State UTAH	Well Configuration Type Vertical
Unique Well ID UT102941	Gr Elev (ft) 4,956.2	Current Elevation 4,978.80, SST 8 - KB 22.58	KB to CF (ft) 22.60	Spud Date 6/11/2014 08:00	Final Drig Rig Release 7/23/2014 18:00
Vertical - Original Hole, 8/18/2014 9:15:59 AM			Total Depth (All) (ft, KB) Original Hole - 8,862.0		

Vertical schematic (actual)		Perforation Statuses					
Date	Status	Com					
8/5/2014	Completion	Top Depth (ft, KB) 6,440.0		Bottom Depth (ft, KB) 6,441.0			
Cutters	Wireline	Gun Size (in) 3 1/8		Carrier Make			
Shot Density (shots/ft) 3.0	Charge Type	Phasing (°)					120
Orientation		Orientation Method					
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)		
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB							
Calculated Shot Total 4							
8/5/2014	Completion	Top Depth (ft, KB) 6,463.0		Bottom Depth (ft, KB) 6,464.0			
Cutters	Wireline	Gun Size (in) 3 1/8		Carrier Make			
Shot Density (shots/ft) 3.0	Charge Type	Phasing (°)					120
Orientation		Orientation Method					
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)		
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB							
Calculated Shot Total 4							
8/5/2014	Completion	Top Depth (ft, KB) 6,490.0		Bottom Depth (ft, KB) 6,491.0			
Cutters	Wireline	Gun Size (in) 3 1/8		Carrier Make			
Shot Density (shots/ft) 3.0	Charge Type	Phasing (°)					120
Orientation		Orientation Method					
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)		
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB							
Calculated Shot Total 4							
8/5/2014	Completion	Top Depth (ft, KB) 6,495.0		Bottom Depth (ft, KB) 6,496.0			
Cutters	Wireline	Gun Size (in) 3 1/8		Carrier Make			
Shot Density (shots/ft) 3.0	Charge Type	Phasing (°)					120
Orientation		Orientation Method					
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)		
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB							
Calculated Shot Total 4							



QEP Energy Company

### Perforations

Well Name: OP 16G-3-7-20

API 43-047-51503	Surface Legal Location S3-T7S-R20E	Field Name BRENNAN BOTTOM	County UINTAH	State UTAH	Well Configuration Type Vertical
Unique Well ID UT102941	Gr Elev (ft) 4,956.2	Current Elevation 4,978.80, SST 8 - KB 22.58	KB to CF (ft) 22.60	Spud Date 6/11/2014 08:00	Final Drig Rig Release 7/23/2014 18:00
Vertical - Original Hole, 8/18/2014 9:15:59 AM			Total Depth (All) (ft, KB) Original Hole - 8,862.0		
<b>Perforation Statuses</b>					
Vertical schematic (actual)					
Date					
Status					
Com					
Date 8/5/2014		Completion		Top Depth (ft, KB) 6,514.0	Bottom Depth (ft, KB) 6,515.0
Perforation Company Cutters		Conveyance Method Wireline		Gun Size (in) 3 1/8	Carrier Make
Shot Density (shots/ft) 3.0		Charge Type		Phasing (°) 120	
Orientation				Orientation Method	
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB					
Calculated Shot Total 4					
<b>Perforation Statuses</b>					
Date					
Status					
Com					
Date 8/5/2014		Completion		Top Depth (ft, KB) 6,544.0	Bottom Depth (ft, KB) 6,545.0
Perforation Company Cutters		Conveyance Method Wireline		Gun Size (in) 3 1/8	Carrier Make
Shot Density (shots/ft) 3.0		Charge Type		Phasing (°) 120	
Orientation				Orientation Method	
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB					
Calculated Shot Total 4					
<b>Perforation Statuses</b>					
Date					
Status					
Com					
Date 8/5/2014		Completion		Top Depth (ft, KB) 6,556.0	Bottom Depth (ft, KB) 6,557.0
Perforation Company Cutters		Conveyance Method Wireline		Gun Size (in) 3 1/8	Carrier Make
Shot Density (shots/ft) 3.0		Charge Type		Phasing (°) 120	
Orientation				Orientation Method	
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB					
Calculated Shot Total 4					
<b>Perforation Statuses</b>					
Date					
Status					
Com					
Date 8/5/2014		Completion		Top Depth (ft, KB) 6,687.0	Bottom Depth (ft, KB) 6,688.0
Perforation Company Cutters		Conveyance Method Wireline		Gun Size (in) 3 1/8	Carrier Make
Shot Density (shots/ft) 3.0		Charge Type		Phasing (°) 120	
Orientation				Orientation Method	
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB					
Calculated Shot Total 4					

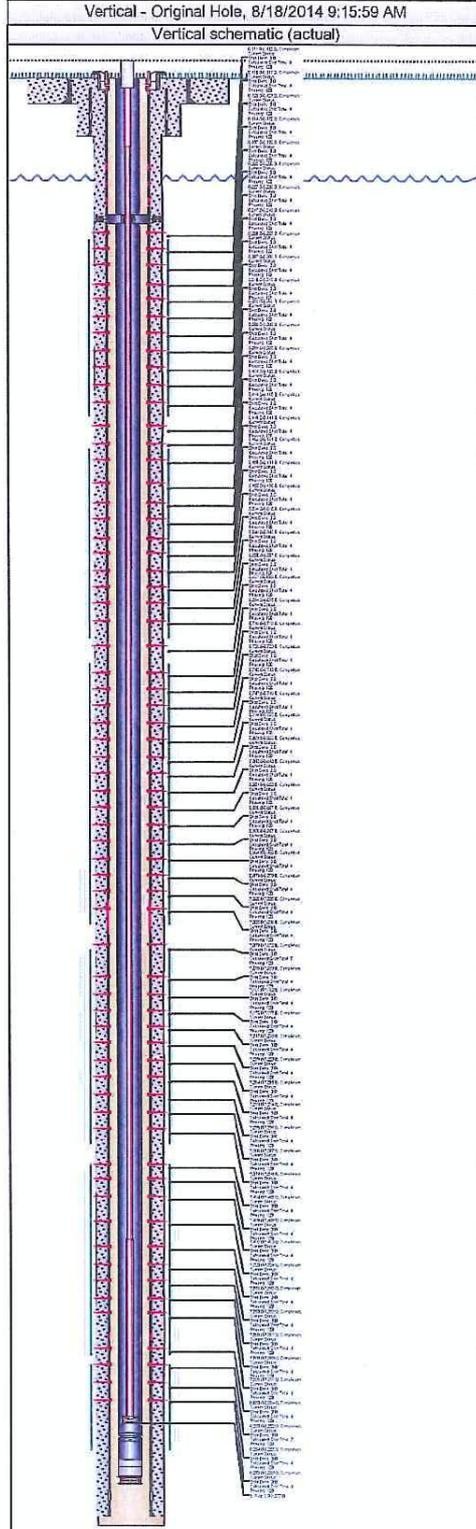


GEP Energy Company

### Perforations

Well Name: OP 16G-3-7-20

API 43-047-51503	Surface Legal Location S3-T7S-R20E	Field Name BRENNAN BOTTOM	County UINTAH	State UTAH	Well Configuration Type Vertical
Unique Well ID UT102941	Gr Elev (ft) 4,956.2	Current Elevation 4,978.80, SST 8 - KB 22.58	KB to CF (ft) 22.60	Spud Date 6/11/2014 08:00	Final Drig Rig Release 7/23/2014 18:00
Vertical - Original Hole, 8/18/2014 9:15:59 AM			Total Depth (All) (ft, KB) Original Hole - 8,862.0		



Perforation Statuses					
Date	Status	Com			
8/4/2014	Completion	Top Depth (ft, KB) 6,694.0	Bottom Depth (ft, KB) 6,695.0		
Perforation Company Cutters	Conveyance Method Wireline	Gun Size (in) 3 1/8	Carrier Make		
Shot Density (shots/ft) 3.0	Charge Type	Phasing (°) 120			
Orientation		Orientation Method			
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB					
Calculated Shot Total 4					
8/4/2014	Completion	Top Depth (ft, KB) 6,718.0	Bottom Depth (ft, KB) 6,719.0		
Perforation Company Cutters	Conveyance Method Wireline	Gun Size (in) 3 1/8	Carrier Make		
Shot Density (shots/ft) 3.0	Charge Type	Phasing (°) 120			
Orientation		Orientation Method			
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB					
Calculated Shot Total 4					
8/4/2014	Completion	Top Depth (ft, KB) 6,728.0	Bottom Depth (ft, KB) 6,729.0		
Perforation Company Cutters	Conveyance Method Wireline	Gun Size (in) 3 1/8	Carrier Make		
Shot Density (shots/ft) 3.0	Charge Type	Phasing (°) 120			
Orientation		Orientation Method			
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB					
Calculated Shot Total 4					
8/4/2014	Completion	Top Depth (ft, KB) 6,742.0	Bottom Depth (ft, KB) 6,743.0		
Perforation Company Cutters	Conveyance Method Wireline	Gun Size (in) 3 1/8	Carrier Make		
Shot Density (shots/ft) 3.0	Charge Type	Phasing (°) 120			
Orientation		Orientation Method			
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB					
Calculated Shot Total 4					



QEP Energy Company

### Perforations

Well Name: OP 16G-3-7-20

API 43-047-51503	Surface Legal Location S3-T7S-R20E	Field Name BRENNAN BOTTOM	County UINTAH	State UTAH	Well Configuration Type Vertical
Unique Well ID UT102941	Gr Elev (ft) 4,956.2	Current Elevation 4,978.80, SST 8 - KB 22.58	KB to CF (ft) 22.60	Spud Date 6/11/2014 08:00	Final Drtg Rig Release 7/23/2014 18:00
Vertical - Original Hole, 8/18/2014 9:15:59 AM			Total Depth (All) (ft, KB) Original Hole - 8,862.0		

Vertical schematic (actual)		Perforation Statuses					
Date	Status	Com					
8/4/2014	Completion	Top Depth (ft, KB) 6,747.0		Bottom Depth (ft, KB) 6,748.0			
Perforation Company Cutters		Conveyance Method Wireline		Gun Size (in) 3 1/8		Carrier Make	
Shot Density (shots/ft) 3.0		Charge Type		Phasing (°)		120	
Orientation				Orientation Method			
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)		
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB							
Calculated Shot Total 4							
8/4/2014	Completion	Top Depth (ft, KB) 6,794.0		Bottom Depth (ft, KB) 6,795.0			
Perforation Company Cutters		Conveyance Method Wireline		Gun Size (in) 3 1/8		Carrier Make	
Shot Density (shots/ft) 3.0		Charge Type		Phasing (°)		120	
Orientation				Orientation Method			
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)		
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB							
Calculated Shot Total 4							
8/4/2014	Completion	Top Depth (ft, KB) 6,801.0		Bottom Depth (ft, KB) 6,802.0			
Perforation Company Cutters		Conveyance Method Wireline		Gun Size (in) 3 1/8		Carrier Make	
Shot Density (shots/ft) 3.0		Charge Type		Phasing (°)		120	
Orientation				Orientation Method			
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)		
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB							
Calculated Shot Total 4							
8/4/2014	Completion	Top Depth (ft, KB) 6,842.0		Bottom Depth (ft, KB) 6,843.0			
Perforation Company Cutters		Conveyance Method Wireline		Gun Size (in) 3 1/8		Carrier Make	
Shot Density (shots/ft) 3.0		Charge Type		Phasing (°)		120	
Orientation				Orientation Method			
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)		
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB							
Calculated Shot Total 4							



### Perforations

QEP Energy Company

Well Name: OP 16G-3-7-20

API 43-047-51503	Surface Legal Location S3-T7S-R20E	Field Name BRENNAN BOTTOM	County UINTAH	State UTAH	Well Configuration Type Vertical
Unique Well ID UT102941	Gr Elev (ft) 4,956.2	Current Elevation 4,978.80, SST 8 - KB 22.58	KB to CF (ft) 22.60	Spud Date 6/11/2014 08:00	Final Drig Rig Release 7/23/2014 18:00
Vertical - Original Hole, 8/18/2014 9:15:59 AM			Total Depth (All) (ft, KB) Original Hole - 8,862.0		
<b>Perforation Statuses</b>					
Vertical schematic (actual)					
Date	Status	Com			
Date 8/4/2014		Completion		Top Depth (ft, KB) 6,851.0	Bottom Depth (ft, KB) 6,852.0
Perforation Company Cutters		Conveyance Method Wireline		Gun Size (in) 3 1/8	Carrier Make
Shot Density (shots/ft)		Charge Type		Phasing (°)	
3.0				120	
Orientation			Orientation Method		
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB					
Calculated Shot Total 4					
<b>Perforation Statuses</b>					
Vertical schematic (actual)					
Date	Status	Com			
Date 8/4/2014		Completion		Top Depth (ft, KB) 6,886.0	Bottom Depth (ft, KB) 6,887.0
Perforation Company Cutters		Conveyance Method Wireline		Gun Size (in) 3 1/8	Carrier Make
Shot Density (shots/ft)		Charge Type		Phasing (°)	
3.0				120	
Orientation			Orientation Method		
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB					
Calculated Shot Total 4					
<b>Perforation Statuses</b>					
Vertical schematic (actual)					
Date	Status	Com			
Date 8/4/2014		Completion		Top Depth (ft, KB) 6,906.0	Bottom Depth (ft, KB) 6,907.0
Perforation Company Cutters		Conveyance Method Wireline		Gun Size (in) 3 1/8	Carrier Make
Shot Density (shots/ft)		Charge Type		Phasing (°)	
3.0				120	
Orientation			Orientation Method		
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB					
Calculated Shot Total 4					
<b>Perforation Statuses</b>					
Vertical schematic (actual)					
Date	Status	Com			
Date 8/4/2014		Completion		Top Depth (ft, KB) 6,934.0	Bottom Depth (ft, KB) 6,935.0
Perforation Company Cutters		Conveyance Method Wireline		Gun Size (in) 3 1/8	Carrier Make
Shot Density (shots/ft)		Charge Type		Phasing (°)	
3.0				120	
Orientation			Orientation Method		
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB					
Calculated Shot Total 4					



QEP Energy Company

### Perforations

Well Name: OP 16G-3-7-20

API 43-047-51503		Surface Legal Location S3-T7S-R20E		Field Name BRENNAN BOTTOM		County UINTAH		State UTAH		Well Configuration Type Vertical	
Unique Well ID UT102941		Gr Elev (ft) 4,956.2		Current Elevation 4,978.80, SST 8 - KB 22.58		KB to CF (ft) 22.60		Spud Date 6/11/2014 08:00		Final Drig Rig Release 7/23/2014 18:00	
								Total Depth (All) (ft, KB) Original Hole - 8,862.0			
Vertical - Original Hole, 8/18/2014 9:15:59 AM											
Vertical schematic (actual)											
<b>Perforation Statuses</b>											
Date		Status				Com					
8/4/2014		Completion				Top Depth (ft, KB) 6,978.0		Bottom Depth (ft, KB) 6,979.0			
Perforation Company Cutters		Conveyance Method Wireline				Gun Size (in) 3 1/8		Carrier Make			
Shot Density (shots/ft) 3.0		Charge Type				Phasing (°) 120					
Orientation						Orientation Method					
Over/Under Balanced		P Over/Under (psi)		FL MD Before (ft, KB)		FL MD After (ft, KB)		P Surf Init (psi)		P Final Surf (psi)	
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB											
Calculated Shot Total 4											
<b>Perforation Statuses</b>											
Date		Status				Com					
8/4/2014		Completion				Top Depth (ft, KB) 7,025.0		Bottom Depth (ft, KB) 7,026.0			
Perforation Company Cutters		Conveyance Method Wireline				Gun Size (in) 3 1/8		Carrier Make			
Shot Density (shots/ft) 3.0		Charge Type				Phasing (°) 120					
Orientation						Orientation Method					
Over/Under Balanced		P Over/Under (psi)		FL MD Before (ft, KB)		FL MD After (ft, KB)		P Surf Init (psi)		P Final Surf (psi)	
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB											
Calculated Shot Total 4											
<b>Perforation Statuses</b>											
Date		Status				Com					
8/4/2014		Completion				Top Depth (ft, KB) 7,035.0		Bottom Depth (ft, KB) 7,036.0			
Perforation Company Cutters		Conveyance Method Wireline				Gun Size (in) 3 1/8		Carrier Make			
Shot Density (shots/ft) 3.0		Charge Type				Phasing (°) 120					
Orientation						Orientation Method					
Over/Under Balanced		P Over/Under (psi)		FL MD Before (ft, KB)		FL MD After (ft, KB)		P Surf Init (psi)		P Final Surf (psi)	
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB											
Calculated Shot Total 4											
<b>Perforation Statuses</b>											
Date		Status				Com					
8/4/2014		Completion				Top Depth (ft, KB) 7,070.0		Bottom Depth (ft, KB) 7,072.0			
Perforation Company Cutters		Conveyance Method Wireline				Gun Size (in) 3 1/8		Carrier Make			
Shot Density (shots/ft) 3.0		Charge Type				Phasing (°) 120					
Orientation						Orientation Method					
Over/Under Balanced		P Over/Under (psi)		FL MD Before (ft, KB)		FL MD After (ft, KB)		P Surf Init (psi)		P Final Surf (psi)	
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB											
Calculated Shot Total 7											



QEP Energy Company

### Perforations

Well Name: OP 16G-3-7-20

API 43-047-51503	Surface Legal Location S3-T7S-R20E	Field Name BRENNAN BOTTOM	County UINTAH	State UTAH	Well Configuration Type Vertical
Unique Well ID UT102941	Gr Elev (ft) 4,956.2	Current Elevation 4,978.80, SST 8 - KB 22.58	KB to CF (ft) 22.60	Spud Date 6/11/2014 08:00	Final Drig Rig Release 7/23/2014 18:00
Vertical - Original Hole, 8/18/2014 9:15:59 AM			Total Depth (All) (ft, KB) Original Hole - 8,862.0		
<b>Vertical schematic (actual)</b>					
<b>Perforation Statuses</b>					
Date		Status		Com	
8/4/2014		Completion		Com	
Perforation Company Cutters		Conveyance Method Wireline		Carrier Make	
Top Depth (ft, KB) 7,098.0		Bottom Depth (ft, KB) 7,099.0		Gun Size (in) 3 1/8	
Shot Density (shots/ft) 3.0		Charge Type		Phasing (°) 120	
Orientation					
Over/Under Balanced		P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi) P Final Surf (psi)
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB					
Calculated Shot Total 4					
<b>Perforation Statuses</b>					
Date		Status		Com	
8/4/2014		Completion		Com	
Perforation Company Cutters		Conveyance Method Wireline		Carrier Make	
Top Depth (ft, KB) 7,151.0		Bottom Depth (ft, KB) 7,152.0		Gun Size (in) 3 1/8	
Shot Density (shots/ft) 3.0		Charge Type		Phasing (°) 120	
Orientation					
Over/Under Balanced		P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi) P Final Surf (psi)
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB					
Calculated Shot Total 4					
<b>Perforation Statuses</b>					
Date		Status		Com	
8/4/2014		Completion		Com	
Perforation Company Cutters		Conveyance Method Wireline		Carrier Make	
Top Depth (ft, KB) 7,176.0		Bottom Depth (ft, KB) 7,177.0		Gun Size (in) 3 1/8	
Shot Density (shots/ft) 3.0		Charge Type		Phasing (°) 120	
Orientation					
Over/Under Balanced		P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi) P Final Surf (psi)
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB					
Calculated Shot Total 4					
<b>Perforation Statuses</b>					
Date		Status		Com	
8/4/2014		Completion		Com	
Perforation Company Cutters		Conveyance Method Wireline		Carrier Make	
Top Depth (ft, KB) 7,217.0		Bottom Depth (ft, KB) 7,218.0		Gun Size (in) 3 1/8	
Shot Density (shots/ft) 3.0		Charge Type		Phasing (°) 120	
Orientation					
Over/Under Balanced		P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi) P Final Surf (psi)
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB					
Calculated Shot Total 4					



QEP Energy Company

### Perforations

Well Name: OP 16G-3-7-20

API 43-047-51503	Surface Legal Location S3-T7S-R20E	Field Name BRENNAN BOTTOM	County UINTAH	State UTAH	Well Configuration Type Vertical
Unique Well ID UT102941	Gr Elev (ft) 4,956.2	Current Elevation 4,978.80, SST 8 - KB 22.58	KB to CF (ft) 22.60	Spud Date 6/11/2014 08:00	Final Drig Rig Release 7/23/2014 18:00
Total Depth (All) (ft, KB) Original Hole - 8,862.0					

Vertical - Original Hole, 8/18/2014 9:16:00 AM		Perforation Statuses			
Vertical schematic (actual)		Date	Status	Com	
	Date	8/4/2014	Completion	Top Depth (ft, KB)	7,228.0
	Perforation Company	Cutters	Conveyance Method	Wireline	Gun Size (in)
	Shot Density (shots/ft)	3.0	Charge Type	Phasing (°)	120
	Orientation	Orientation Method			
	Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)
	Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB				
	Calculated Shot Total				
	4				
	Date	8/4/2014	Completion	Top Depth (ft, KB)	7,264.0
	Perforation Company	Cutters	Conveyance Method	Wireline	Gun Size (in)
Shot Density (shots/ft)	3.0	Charge Type	Phasing (°)	120	
Orientation	Orientation Method				
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB					
Calculated Shot Total					
4					
Date	8/4/2014	Completion	Top Depth (ft, KB)	7,293.0	
Perforation Company	Cutters	Conveyance Method	Wireline	Gun Size (in)	
Shot Density (shots/ft)	3.0	Charge Type	Phasing (°)	120	
Orientation	Orientation Method				
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB					
Calculated Shot Total					
4					
Date	8/4/2014	Completion	Top Depth (ft, KB)	7,296.0	
Perforation Company	Cutters	Conveyance Method	Wireline	Gun Size (in)	
Shot Density (shots/ft)	3.0	Charge Type	Phasing (°)	120	
Orientation	Orientation Method				
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB					
Calculated Shot Total					
4					



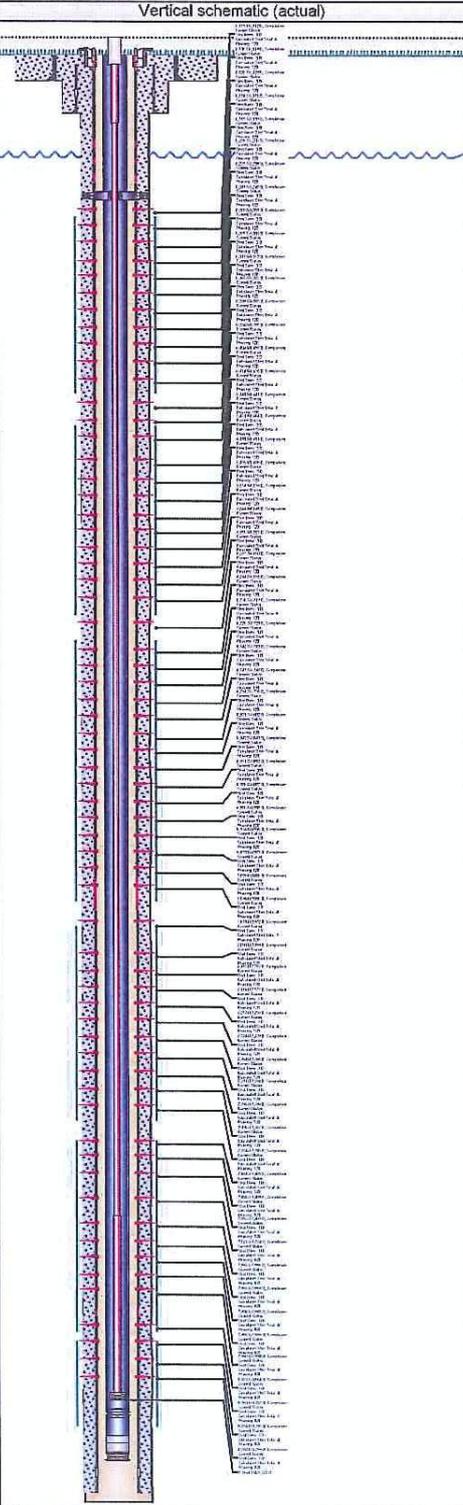
QEP Energy Company

### Perforations

Well Name: OP 16G-3-7-20

API 43-047-51503	Surface Legal Location S3-T7S-R20E	Field Name BRENNAN BOTTOM	County UINTAH	State UTAH	Well Configuration Type Vertical
Unique Well ID UT102941	Gr Elev (ft) 4,956.2	Current Elevation 4,978.80, SST 8 - KB 22.58	KB to CF (ft) 22.60	Spud Date 6/11/2014 08:00	Final Drig Rig Release 7/23/2014 18:00
Total Depth (All) (ft, KB) Original Hole - 8,862.0					

Vertical - Original Hole, 8/18/2014 9:16:00 AM



Perforation Statuses					
Date	Status	Com			
8/4/2014	Completion	Top Depth (ft, KB) 7,306.0	Bottom Depth (ft, KB) 7,307.0		
Perforation Company Cutters	Conveyance Method Wireline	Gun Size (in) 3 1/8	Carrier Make		
Shot Density (shots/ft) 3.0	Charge Type	Phasing (°)		120	
Orientation		Orientation Method			
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB					
Calculated Shot Total 4					
Perforation Statuses					
Date	Status	Com			
8/4/2014	Completion	Top Depth (ft, KB) 7,314.0	Bottom Depth (ft, KB) 7,315.0		
Perforation Company Cutters	Conveyance Method Wireline	Gun Size (in) 3 1/8	Carrier Make		
Shot Density (shots/ft) 3.0	Charge Type	Phasing (°)		120	
Orientation		Orientation Method			
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB					
Calculated Shot Total 4					
Perforation Statuses					
Date	Status	Com			
8/4/2014	Completion	Top Depth (ft, KB) 7,484.0	Bottom Depth (ft, KB) 7,485.0		
Perforation Company Cutters	Conveyance Method Wireline	Gun Size (in) 3 1/8	Carrier Make		
Shot Density (shots/ft) 3.0	Charge Type	Phasing (°)		120	
Orientation		Orientation Method			
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB					
Calculated Shot Total 4					
Perforation Statuses					
Date	Status	Com			
8/4/2014	Completion	Top Depth (ft, KB) 7,488.0	Bottom Depth (ft, KB) 7,489.0		
Perforation Company Cutters	Conveyance Method Wireline	Gun Size (in) 3 1/8	Carrier Make		
Shot Density (shots/ft) 3.0	Charge Type	Phasing (°)		120	
Orientation		Orientation Method			
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB					
Calculated Shot Total 4					

RECEIVED: Sep. 08, 2014



QEP Energy Company

### Perforations

Well Name: OP 16G-3-7-20

API 43-047-51503		Surface Legal Location S3-T7S-R20E		Field Name BRENNAN BOTTOM		County UINTAH		State UTAH		Well Configuration Type Vertical	
Unique Well ID UT102941		Gr Elev (ft) 4,956.2		Current Elevation 4,978.80, SST 8 - KB 22.58		KB to CF (ft) 22.60		Spud Date 6/11/2014 08:00		Final Drig Rig Release 7/23/2014 18:00	
								Total Depth (All) (ft, KB) Original Hole - 8,862.0			

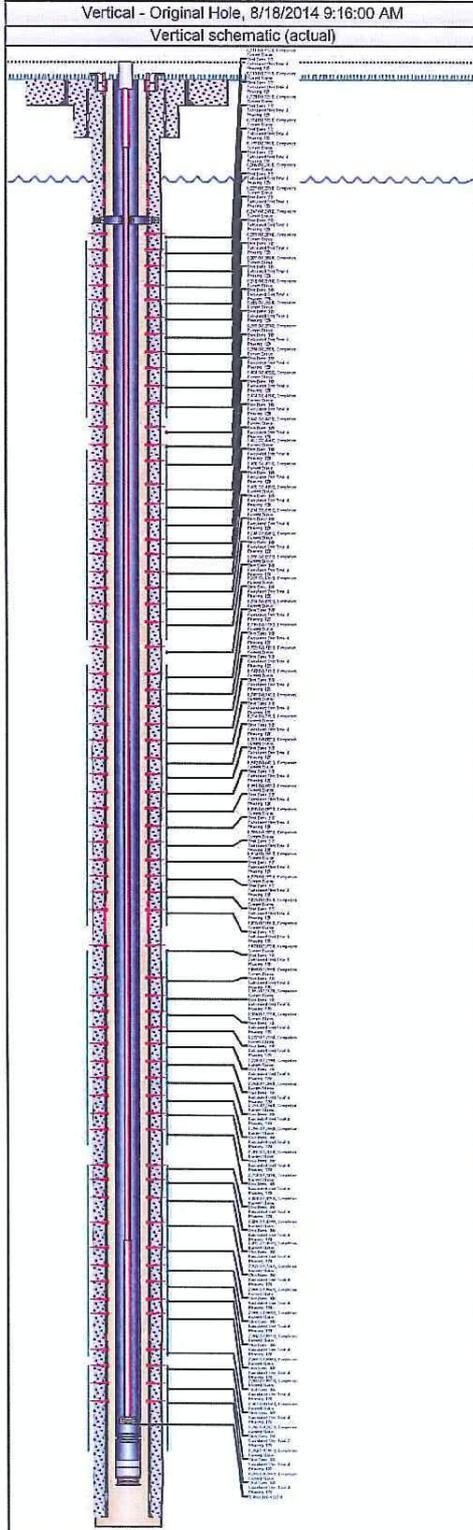
Vertical - Original Hole, 8/18/2014 9:16:00 AM		Perforation Statuses	
Date	Status	Com	
8/4/2014	Completion	Top Depth (ft, KB) 7,492.0	Bottom Depth (ft, KB) 7,493.0
Cutters	Conveyance Method Wireline	Gun Size (in) 3 1/8	Carrier Make
Shot Density (shots/ft) 3.0	Charge Type	Phasing (°) 120	
Orientation		Orientation Method	
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB		Calculated Shot Total 4	
Perforation Statuses		Perforation Statuses	
Date	Status	Com	
8/4/2014	Completion	Top Depth (ft, KB) 7,723.0	Bottom Depth (ft, KB) 7,724.0
Cutters	Conveyance Method Wireline	Gun Size (in) 3 1/8	Carrier Make
Shot Density (shots/ft) 3.0	Charge Type	Phasing (°) 120	
Orientation		Orientation Method	
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB		Calculated Shot Total 4	
Perforation Statuses		Perforation Statuses	
Date	Status	Com	
8/4/2014	Completion	Top Depth (ft, KB) 7,955.0	Bottom Depth (ft, KB) 7,956.0
Cutters	Conveyance Method Wireline	Gun Size (in) 3 1/8	Carrier Make
Shot Density (shots/ft) 3.0	Charge Type	Phasing (°) 120	
Orientation		Orientation Method	
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB		Calculated Shot Total 4	
Perforation Statuses		Perforation Statuses	
Date	Status	Com	
8/4/2014	Completion	Top Depth (ft, KB) 7,958.0	Bottom Depth (ft, KB) 7,959.0
Cutters	Conveyance Method Wireline	Gun Size (in) 3 1/8	Carrier Make
Shot Density (shots/ft) 3.0	Charge Type	Phasing (°) 120	
Orientation		Orientation Method	
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB		Calculated Shot Total 4	



### Perforations

Well Name: OP 16G-3-7-20

API 43-047-51503	Surface Legal Location S3-T7S-R20E	Field Name BRENNAN BOTTOM	County UINTAH	State UTAH	Well Configuration Type Vertical
Unique Well ID UT102941	Gr Elev (ft) 4,956.2	Current Elevation 4,978.80, SST 8 - KB 22.58	KB to CF (ft) 22.60	Spud Date 6/11/2014 08:00	Final Drig Rig Release 7/23/2014 18:00
					Total Depth (All) (ft, KB) Original Hole - 8,862.0



Perforation Statuses					
Date	Status	Com			
8/4/2014	Completion	Top Depth (ft, KB) 7,980.0	Bottom Depth (ft, KB) 7,981.0		
Perforation Company Cutters	Conveyance Method Wireline	Gun Size (in) 3 1/8	Carrier Make		
Shot Density (shots/ft) 3.0	Charge Type	Phasing (°)		120	
Orientation		Orientation Method			
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB					
Calculated Shot Total 4					
Perforation Statuses					
Date	Status	Com			
8/4/2014	Completion	Top Depth (ft, KB) 7,988.0	Bottom Depth (ft, KB) 7,989.0		
Perforation Company Cutters	Conveyance Method Wireline	Gun Size (in) 3 1/8	Carrier Make		
Shot Density (shots/ft) 3.0	Charge Type	Phasing (°)		120	
Orientation		Orientation Method			
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB					
Calculated Shot Total 4					
Perforation Statuses					
Date	Status	Com			
8/4/2014	Completion	Top Depth (ft, KB) 7,990.0	Bottom Depth (ft, KB) 7,991.0		
Perforation Company Cutters	Conveyance Method Wireline	Gun Size (in) 3 1/8	Carrier Make		
Shot Density (shots/ft) 3.0	Charge Type	Phasing (°)		120	
Orientation		Orientation Method			
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB					
Calculated Shot Total 4					
Perforation Statuses					
Date	Status	Com			
8/4/2014	Completion	Top Depth (ft, KB) 8,053.0	Bottom Depth (ft, KB) 8,054.0		
Perforation Company Cutters	Conveyance Method Wireline	Gun Size (in) 3 1/8	Carrier Make		
Shot Density (shots/ft) 3.0	Charge Type	Phasing (°)		120	
Orientation		Orientation Method			
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB					
Calculated Shot Total 4					



QEP Energy Company

### Perforations

Well Name: OP 16G-3-7-20

API 43-047-51503	Surface Legal Location S3-T7S-R20E	Field Name BRENNAN BOTTOM	County UINTAH	State UTAH	Well Configuration Type Vertical
Unique Well ID UT102941	Gr Elev (ft) 4,956.2	Current Elevation 4,978.80, SST 8 - KB 22.58	KB to CF (ft) 22.60	Spud Date 6/11/2014 08:00	Final Drig Rig Release 7/23/2014 18:00
			Total Depth (All) (ft, KB) Original Hole - 8,862.0		

Vertical - Original Hole, 8/18/2014 9:16:00 AM		Perforation Statuses					
Vertical schematic (actual)		Date	Status	Com			
		Date	Completion	Top Depth (ft, KB)	Bottom Depth (ft, KB)		
		7/29/2014		8,250.0	8,252.0		
		Perforation Company	Conveyance Method	Gun Size (in)	Carrier Make		
		Cutters	Wireline	3 1/8			
		Shot Density (shots/ft)	Charge Type	Phasing (*)		120	
		3.0					
		Orientation		Orientation Method			
		Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
		Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB					
		Calculated Shot Total 7					
		Perforation Statuses					
		Date	Status	Com			
		Date	Completion	Top Depth (ft, KB)	Bottom Depth (ft, KB)		
		7/29/2014		8,254.0	8,255.0		
		Perforation Company	Conveyance Method	Gun Size (in)	Carrier Make		
		Cutters	Wireline	3 1/8			
		Shot Density (shots/ft)	Charge Type	Phasing (*)			
		3.0					
		Orientation		Orientation Method			
		Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)		
		P Surf Init (psi)	P Final Surf (psi)				
		Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB					
		Calculated Shot Total 4					
		Perforation Statuses					
		Date	Status	Com			
		Date	Completion	Top Depth (ft, KB)	Bottom Depth (ft, KB)		
		7/29/2014		8,258.0	8,259.0		
		Perforation Company	Conveyance Method	Gun Size (in)	Carrier Make		
		Cutters	Wireline	3 1/8			
		Shot Density (shots/ft)	Charge Type	Phasing (*)			
		3.0					
		Orientation		Orientation Method			
		Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)		
		P Surf Init (psi)	P Final Surf (psi)				
		Reference Log SCHLUMBERGER PEX, 1,615.0-8,854.0ft, KB					
		Calculated Shot Total 4					



QEP Energy Casing

SURFACE

QEP Energy Company

Well Name: OP 16G-3-7-20

API 43-047-51503	Surface Legal Location S3-T7S-R20E	Field Name BRENNAN BOTTOM	County UINTAH	State UTAH	Well Configuration Type Vertical	
Unique Well ID UT102941	Ground Elevation (ft) 4,956.2	Casing Flange Elevation (ft) 4,956.20	Current KB to GL (ft) 22.60	KB to CF (ft) 22.60	Spud Date 6/11/2014 08:00	Final Drig Rig Release 7/23/2014 18:00

Wellbore

Wellbore Name Original Hole			Sidetrack Start Depth (ft, KB)		
Section Des	Size (in)	Act Top (ft, KB)	Act Btm (ft, KB)	Start Date	End Date
CONDUCTOR	24	22.6	62.6	6/12/2014	6/12/2014
SURFACE	12 1/4	62.6	1,615.0	7/6/2014	7/7/2014

Casing

Casing Description SURFACE	Set Depth (ft, KB) 1,615.0	Run Date 7/7/2014	Set Tension (kips)
Centralizers 3	Scratchers		

Casing Components

Item Des	OD (in)	Wt (lb/ft)	Grade	Top Thread	Jts	Len (ft)	Top (ft, KB)	Btm (ft, KB)	Mk-up Tq (ft-lb)	Class	Max OD (in)	ID (in)
Casing Joints	9 5/8	36.00	J-55		38	1,574.34	-4.2	1,570.2				8.921
Float Collar	9 5/8	36.00	J-55		1	1.50	1,570.2	1,571.7				8.921
Casing Joints	9 5/8	36.00	J-55		1	41.48	1,571.7	1,613.1				8.921
Guide Shoe	9 5/8	36.00	J-55		1	1.87	1,613.1	1,615.0				8.921



QEP Energy Cement

SURFACE CASING CEMENT

QEP Energy Company

Well Name: OP 16G-3-7-20

API 43-047-51503	Surface Legal Location S3-T7S-R20E	Field Name BRENNAN BOTTOM	County UINTAH	State UTAH	Well Configuration Type Vertical
Unique Well ID UT102941	Ground Elevation (ft) 4,956.2	Casing Flange Elevation (ft) 4,956.20	Current KB to GL (ft) 22.60	KB to CF (ft) 22.60	Spud Date 6/11/2014 08:00
Final Drig Rig Release 7/23/2014 18:00					

**SURFACE CASING CEMENT, Casing, 7/7/2014 16:30**

Type Casing	Cementing Start Date 7/7/2014	Cementing End Date 7/7/2014	Wellbore Original Hole	String SURFACE, 1,615.0ft, KB	OD (in) 9 5/8
Cementing Company Halliburton Energy Services	Evaluation Method Returns to Surface	Cement Evaluation Results CIRCULATED 81 BBLs.OF CEMENT TO SURFACE			

Comment  
JOB WENT WELL

**1, 22.6-1,615.0ft, KB**

Top Depth (ft, KB) 22.6	Bottom Depth (ft, KB) 1,615.0	Full Return? No	Top Plug? Yes	Bottom Plug? No
Initial Pump Rate (bbl/min) 5	Final Pump Rate (bbl/min) 5	Avg Pump Rate (bbl/min) 5	Final Pump Pressure (psi) 550.0	Plug Bump Pressure (psi) 1,200.0
Pipe Reciprocated? No	Reciprocation Stroke Length (ft)	Reciprocation Rate (spm)	Pipe Rotated? No	Pipe RPM (rpm)
Tagged Depth (ft, KB)	Tag Method	Depth Plug Drilled Out To (ft, KB)	Drill Out Diameter (in)	Drill Out Date
Cement Volume Return (bbl) 81.0	Volume Lost (bbl)	Volume Squeezed In to Formation (bbl)		

**LEAD**

Fluid Type LEAD	Fluid Description LEAD	Amount (sacks) 315	Class VARICEM (TM)	Objective Cement Surface
Estimated Top (ft, KB) 22.6	Estimated Bottom Depth (ft, KB) 338.0	Percent Excess Pumped (%) 150.0	Yield (ft <sup>3</sup> /sack) 2.74	Mix H2O Ratio (gal/sack) 16.75
Free Water (%)	Density (lb/gal) 11.50	Volume Pumped (bbl) 154.0	Thickening Time (hr)	1st Compressive Strength (psi)

**Cement Fluid Additives**

Add	Type	Conc	Conc Unit	Amount Units

**TAIL**

Fluid Type TAIL	Fluid Description TAIL	Amount (sacks) 250	Class VARICEM (TM)	Objective Cement Surface
Estimated Top (ft, KB) 338.0	Estimated Bottom Depth (ft, KB) 1,615.0	Percent Excess Pumped (%) 150.0	Yield (ft <sup>3</sup> /sack) 1.68	Mix H2O Ratio (gal/sack) 8.80
Free Water (%)	Density (lb/gal) 13.50	Volume Pumped (bbl) 75.0	Thickening Time (hr)	1st Compressive Strength (psi)

**Cement Fluid Additives**

Add	Type	Conc	Conc Unit	Amount Units

**Leak Off and Formation Integrity Tests**

**Mud Data**

Date	Type	Density (lb/gal)	Vis (s/qt)	PV Override (cP)	YP OR (lb/100ft <sup>2</sup> )	Gel (10s) (lb/100...)	Gel (10m) (lb/100...)
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QEP Energy Company

QEP Energy Casing

PRODUCTION

Well Name: OP 16G-3-7-20

API 43-047-51503	Surface Legal Location S3-T7S-R20E	Field Name BRENNAN BOTTOM	County UINTAH	State UTAH	Well Configuration Type Vertical
Unique Well ID UT102941	Ground Elevation (ft) 4,956.2	Casing Flange Elevation (ft) 4,956.20	Current KB to GL (ft) 22.60	KB to CF (ft) 22.60	Spud Date 6/11/2014 08:00
					Final Drig Rig Release 7/23/2014 18:00

Wellbore

Wellbore Name Original Hole			Sidetrack Start Depth (ft, KB)		
Section Des	Size (in)	Act Top (ft, KB)	Act Btm (ft, KB)	Start Date	End Date
CONDUCTOR	24	22.6	62.6	6/12/2014	6/12/2014
SURFACE	12 1/4	62.6	1,615.0	7/6/2014	7/7/2014
INTERMEDIATE	7 7/8	1,615.0	8,862.0	7/8/2014	7/18/2014

Casing

Casing Description PRODUCTION	Set Depth (ft, KB) 8,844.0	Run Date 7/22/2014	Set Tension (kips)
Centralizers 4	Scratchers		

Casing Components

Item Des	OD (in)	Wt (lb/ft)	Grade	Top Thread	Jts	Len (ft)	Top (ft, KB)	Btm (ft, KB)	Mk-up Tq (ft-lb)	Class	Max OD (in)	ID (in)
Landing Joint	5 1/2	17.00	P-110	LT&C	0	0.00	22.1	22.1				4.892
Casing Hanger	5 1/2	17.00	P-110	LT&C	1	4.96	22.1	27.1				4.892
Casing Joints	5 1/2	17.00	P-110	LT&C	97	4,000.49	27.1	4,027.6				4.892
Marker Joint	5 1/2	17.00	P-110	LT&C	1	20.19	4,027.6	4,047.7				4.892
Casing Joints	5 1/2	17.00	P-110	LT&C	23	964.32	4,047.7	5,012.1				4.892
Marker Joint	5 1/2	17.00	P-110	LT&C	1	20.39	5,012.1	5,032.5				4.892
Casing Joints	5 1/2	17.00	P-110	LT&C	24	1,007.05	5,032.5	6,039.5				4.892
Marker Joint	5 1/2	17.00	P-110	LT&C	1	20.39	6,039.5	6,059.9				4.892
Casing Joints	5 1/2	17.00	P-110	LT&C	23	966.04	6,059.9	7,025.9				4.892
Marker Joint	5 1/2	17.00	P-110	LT&C	1	20.14	7,025.9	7,046.1				4.892
Casing Joints	5 1/2	17.00	P-110	LT&C	23	949.83	7,046.1	7,995.9				4.892
Marker Joint	5 1/2	17.00	P-110	LT&C	1	20.11	7,995.9	8,016.0				4.892
Casing Joints	5 1/2	17.00	P-110	LT&C	19	783.25	8,016.0	8,799.3				4.892
Float Collar	5 1/2	17.00	P-110	LT&C	1	1.23	8,799.3	8,800.5				4.892
Casing Joints	5 1/2	17.00	P-110	LT&C	1	41.41	8,800.5	8,841.9				4.892
Float Shoe	5 1/2	17.00	P-110	LT&C	1	2.10	8,841.9	8,844.0				4.892

