

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

FORM 3

AMENDED REPORT

<b>APPLICATION FOR PERMIT TO DRILL</b>						1. WELL NAME and NUMBER EM 1G-36-9-17								
2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						3. FIELD OR WILDCAT EIGHT MILE FLAT								
4. TYPE OF WELL Oil Well Coalbed Methane Well: NO						5. UNIT or COMMUNITIZATION AGREEMENT NAME								
6. NAME OF OPERATOR QEP ENERGY COMPANY						7. OPERATOR PHONE 303 308-3068								
8. ADDRESS OF OPERATOR 11002 East 17500 South, Vernal, Ut, 84078						9. OPERATOR E-MAIL debbie.stanberry@qepres.com								
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) ML51206			11. MINERAL OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>			12. SURFACE OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>								
13. NAME OF SURFACE OWNER (if box 12 = 'fee')						14. SURFACE OWNER PHONE (if box 12 = 'fee')								
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')						16. SURFACE OWNER E-MAIL (if box 12 = 'fee')								
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')			18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>			19. SLANT 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		680 FNL 853 FEL		NENE		36		9.0 S		17.0 E		S		
Top of Uppermost Producing Zone		680 FNL 853 FEL		NENE		36		9.0 S		17.0 E		S		
At Total Depth		660 FSL 1400 FEL		SWSE		36		9.0 S		17.0 E		S		
21. COUNTY UINTAH			22. DISTANCE TO NEAREST LEASE LINE (Feet) 660			23. NUMBER OF ACRES IN DRILLING UNIT 640								
			25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 2570			26. PROPOSED DEPTH MD: 9077 TVD: 5186								
27. ELEVATION - GROUND LEVEL 5286			28. BOND NUMBER 965010695			29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE A36125/ 49-2153/ 43-11787								
<b>Hole, Casing, and Cement Information</b>														
String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement		Sacks	Yield	Weight			
SURF	12.25	9.625	0 - 500	36.0	J-55 ST&C	0.0	Premium Plus		233	1.35	14.8			
PROD	8.75	7	0 - 4740	26.0	N-80 LT&C	9.5	Halliburton Light , Type Unknown		370	2.95	11.0			
							50/50 Poz		190	1.24	13.5			
<b>ATTACHMENTS</b>														
<b>VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES</b>														
<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 checked="" type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)						<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP								
NAME Jan Nelson				TITLE Permit Agent				PHONE 435 781-4331						
SIGNATURE				DATE 02/24/2012				EMAIL jan.nelson@qepres.com						
API NUMBER ASSIGNED 43047524000000				APPROVAL				 Permit Manager						

**QEP Energy Company**  
**EM 1G36-9-17**  
**Summarized Drilling Procedure**

1. MIRU air rig.
2. Drill 12-1/4" hole to 500' on air.
3. Run and cement 9-5/8" 36# J-55 STC.
4. RDMO air rig.
5. MIRU drilling rig.
6. NU and test rig's 3M BOPE
7. Drill 8-3/4" hole with water based mud to 4,740'
8. Log with triple combo.
9. RIH with 7" 26# N-80 LTC casing and cement.
10. Drill out of 7" casing with 6 1/8" bit.
11. Start building curve at 4,824' to land in the HP Dolomite/Lime
12. Cont drilling lateral to TD at 9,077 MD / 5,186' TVD / 91.9 deg INC / 188 deg AZ
13. RIH with 4-1/2" 11.6# N-80 LTC liner with packers and sleeves. TOL at 4,640'.
14. Set RBP at +/- 4,000'.
15. RDMO drilling rig.
16. Release location to completions.

**CONFIDENTIAL**

QEP ENERGY COMPANY  
 EM 1G36-9-17  
 SHL: 680' FNL & 853' FEL Section 36 T9S R17E  
 BHL: 660' FSL & 1,400' FEL Section 36 T9S R17E  
 Uintah County, Utah

## 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:

Formation	Depth, MD (ft)	Depth, TVD (ft)
Uinta	Surface	Surface
Green River	1700	1700
Garden Gulch Mbr	3137	3137
KOP	4824	4824
Uteland Butte Mbr	5354	5252
HP Zone	5541	5301
TD	9077	5186

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

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

<u>Substance</u>	<u>Formation</u>	<u>Depth, MD</u>	<u>Depth, TVD</u>
Oil/Gas	Uteland Butte Mbr	5,354'	5,252'

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

## QEP ENERGY COMPANY

EM 1G36-9-17

SHL: 680' FNL &amp; 853' FEL Section 36 T9S R17E

BHL: 660' FSL &amp; 1,400' FEL Section 36 T9S R17E

Uintah County, Utah

resulting from drilling operations will be disposed of at LaPoint Recycling and Storage in Section 12, T5S R19E of Uintah County, UT or Red Wash Disposal site; SESE, Section 28, T7S, R23E or West End Disposal Site; NESE, Section 28, T7S, R22E.

**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 milling the first window; 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
20"	16"	sfc	40	Steel			New	N/A
12 1/4"	9 5/8"	sfc	500	36.0	J-55	STC	New	Air
8 3/4"	7"	sfc	4740	26.0	N-80	LTC	New	9.5
6 1/8"	4 1/2"	4640	9047	11.6	N-80	LTC	New	9.5

Casing Strengths						
Size (in)	Weight (ppf)	Grade	CXN	Collapse (psi)	Burst (psi)	Tensile (lbs)
9 5/8"	36	J-55	STC	2020	3520	394000
7"	26	N-80	LTC	5410	7240	519000
4 1/2"	11.6	N-80	LTC	6350	7780	212000

\*The lateral(s) will be lined with a swell packer / frack port liner and left uncemented.

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

QEP ENERGY COMPANY

EM 1G36-9-17

SHL: 680' FNL & 853' FEL Section 36 T9S R17E

BHL: 660' FSL & 1,400' FEL Section 36 T9S R17E

Uintah County, Utah

**MINIMUM DESIGN FACTORS\*:**

\*The casing listed meets or exceeds the following design factors.

COLLAPSE: 1.6

BURST: 1.6

TENSION: 1.8

Area Fracture Gradient: 0.7 psi/foot

Maximum anticipated mud weight: 9.5 ppg

Maximum surface treating pressure: 4,000 psi

**5. 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

If drilling with air the following will be used:

F. The blooie line shall be at least 6" in diameter and extend at least 100' from the well bore into the reserve/blooie pit.

G. Blooie line ignition shall be provided by a continuous pilot (ignited when drilling below 500').

H. Compressor shall be tied directly to the blooie line through a manifold.

I. A mister with a continuous stream of water shall be installed near the end of the blooie lines for dust suppression.

The surface hole will be drilled with air, air/mist, foam, or mud depending on hole conditions. Drilling below surface casing will be with water based drilling fluids consisting primarily of fresh water, bentonite, lignite, caustic, lime, soda ash and polymers. No chromates will be used. It is not intended to use oil in the mud, however, in the event it is used, oil concentration will be less than 4% by volume. Maximum anticipated mud weight is 9.5 ppg.

QEP ENERGY COMPANY

EM 1G36-9-17

SHL: 680' FNL & 853' FEL Section 36 T9S R17E

BHL: 660' FSL & 1,400' FEL Section 36 T9S R17E

Uintah County, Utah

Laterals will be drilled with an inhibitive water-based mud system consisting primarily of fresh water, bentonite, lignite, caustic, lime, soda ash, and polymers. No

chromates will be used. It is not intended to use oil in the mud, however, in the event it is used the concentration will be less than 4% by volume. Maximum anticipated mud weight is 9.5 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.

**6. Cementing Program**

**16" Conductor:**

Cement to surface with construction cement

**9-5/8" Surface Casing: 0' – 500' (MD)**

**Lead/Tail Slurry:** 0' – 500'. 233 sks (313 cu ft) Premium Plus – Type III. Slurry wt: 14.8 ppg, Slurry yield: 1.35 ft<sup>3</sup>/sk, Slurry volume: 12-1/4" hole + 100% excess.

**7" Production Casing: 0' – 4,740' (MD)**

**Lead Slurry:** 0' – 3,740'. 370 sks (1064 cu ft) Halliburton Light Cement. Slurry weight: 11.0 ppg, Slurry yield: 2.95 ft<sup>3</sup>/sk, Slurry volume: 8.75" hole + 100% excess in open hole.

**Tail Slurry:** 3,740' – 4,740'. 190 sks (272 cu ft) 50/50 Poz Premium. Slurry wt: 13.5 ppg, Slurry yield: 1.24 ft<sup>3</sup>/sk, Slurry volume: 8-3/4" hole + 75% excess.

**6-1/8" Lateral: 4,824' – 9,047'**

Uncemented liner with packers and sleeves.

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

A. Cores – None Anticipated

B. DST – None Anticipated

C. Logging:

i. Mud logging from 1,000' to TD

ii. Triple combo from BSC to ICP deg INC

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

QEP ENERGY COMPANY

EM 1G36-9-17

SHL: 680' FNL & 853' FEL Section 36 T9S R17E

BHL: 660' FSL & 1,400' FEL Section 36 T9S R17E

Uintah County, Utah

- D. Formation and completion interval: HP Dolomite/Lime, 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 2,342 psi. Maximum anticipated bottom hole temperature is approximately 140°F.

**CONFIDENTIAL**

QEP ENERGY COMPANY

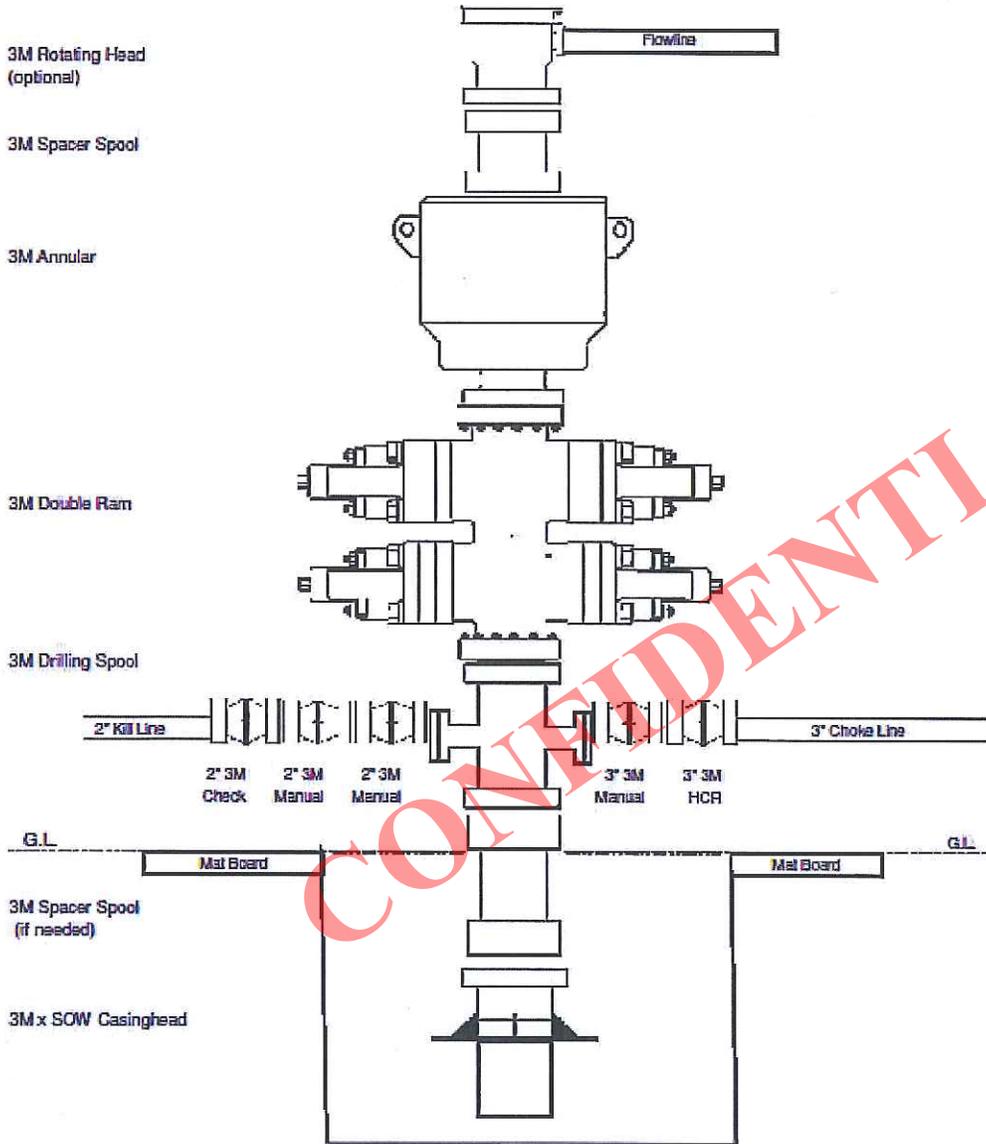
EM 1G36-9-17

SHL: 680' FNL & 853' FEL Section 36 T9S R17E

BHL: 660' FSL & 1,400' FEL Section 36 T9S R17E

Uintah County, Utah

**3M BOP x 3M Annular  
Minimum Requirements**



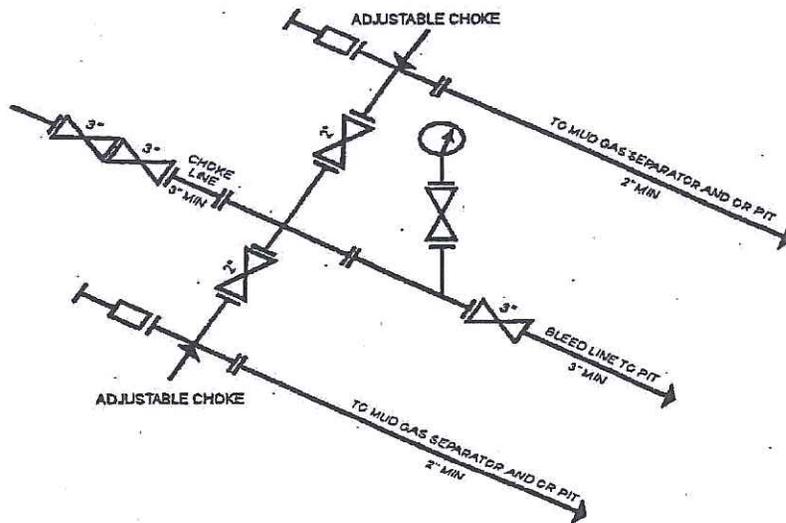
QEP ENERGY COMPANY

EM 1G36-9-17

SHL: 680' FNL & 853' FEL Section 36 T9S R17E

BHL: 660' FSL & 1,400' FEL Section 36 T9S R17E

Uintah County, Utah



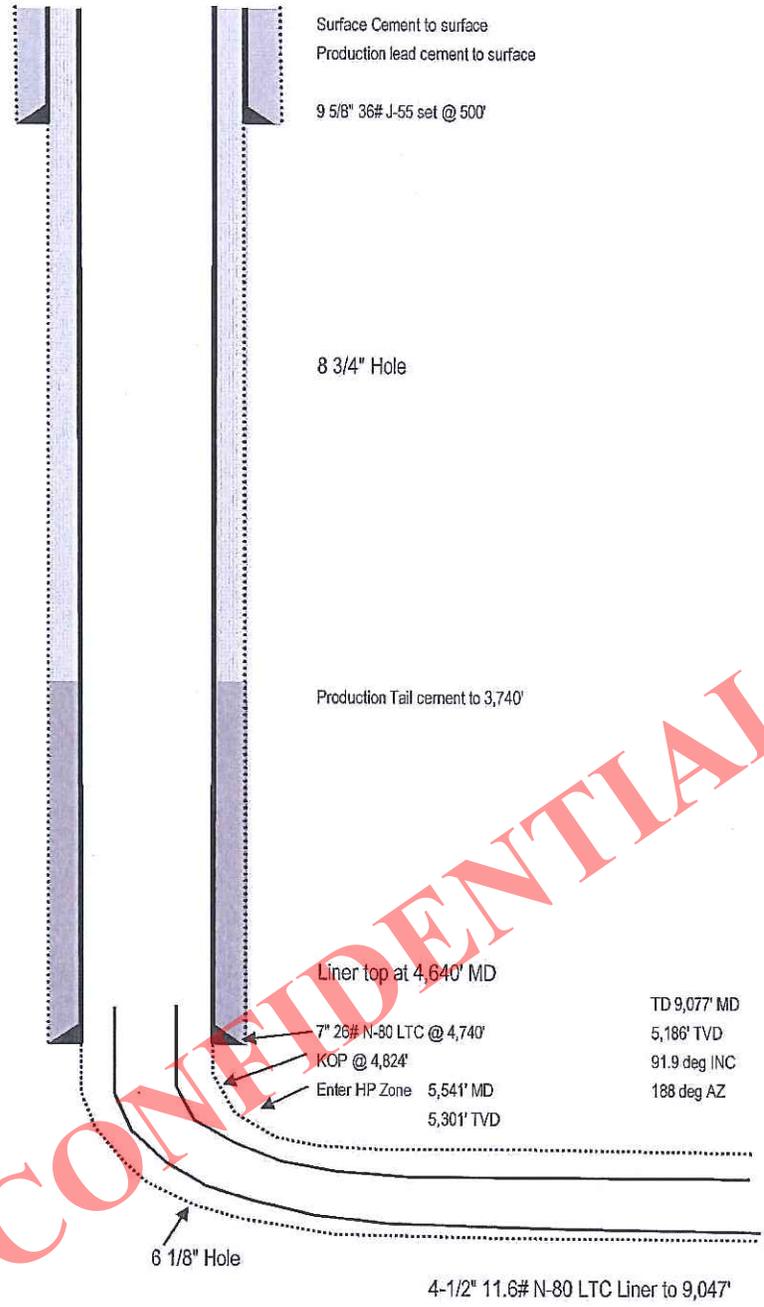
3M CHOKE MANIFOLD EQUIPMENT - CONFIGURATION OF CHOKES MAY VARY  
[54 FR 39528, Sept. 27, 1989]

**CONFIDENTIAL**

**Proposed  
EM 1G36-9-17**

SHL: 680' FNL & 853' FEL Section 36 T9S R17E  
BHL: 660' FSL & 1,400' FEL Section 36 T9S R17E

Uintah County, Utah  
KB 5,299'  
GL 5,285'



**CONFIDENTIAL**



QEP Energy Company

## QEP ENERGY (UT)

Eight Mile Flat

EM 1G36-9-17

EM 1G36-9-17

Original Hole

Plan: Plan ver.0

## Standard Planning Report

13 February, 2012

**CONFIDENTIAL**



QEP Energy Company



QEP Resources, Inc.  
Planning Report



Database:	EDMDB_QEP	Local Co-ordinate Reference:	Well EM 1G36-9-17
Company:	QEP ENERGY (UT)	TVD Reference:	RKB @ 5299.10usft (EST. RKB)
Project:	Eight Mile Flat	MD Reference:	RKB @ 5299.10usft (EST. RKB)
Site:	EM 1G36-9-17	North Reference:	True
Well:	EM 1G36-9-17	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan ver.0		

Project	Eight Mile Flat, Uintah		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Utah Central Zone		Using geodetic scale factor

Site	EM 1G36-9-17				
Site Position:		Northing:	7,169,871.188 usft	Latitude:	39.992803
From:	Lat/Long	Easting:	2,075,027.500 usft	Longitude:	-109.948656
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.99 °

Well	EM 1G36-9-17					
Well Position	+N-S	-0.01 usft	Northing:	7,169,871.180 usft	Latitude:	39.992803
	+E-W	0.00 usft	Easting:	2,075,027.500 usft	Longitude:	-109.948656
Position Uncertainty		0.00 usft	Wellhead Elevation:	5,285.10 usft	Ground Level:	5,285.10 usft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2/13/2012	11.17	65.78	52,194

Design	Plan ver.0				
Audit Notes:					
Version:	Phase:	PLAN	Tie On Depth:	0.00	
Vertical Section:	Depth From (TVD) (usft)	+N-S (usft)	+E-W (usft)	Direction (°)	
	0.00	0.00	0.00	187.91	

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,824.93	0.00	0.00	4,824.93	0.00	0.00	0.00	0.00	0.00	0.00	
5,590.77	91.90	187.91	5,302.13	-488.61	-67.86	12.00	12.00	0.00	187.91	
9,077.54	91.90	187.91	5,186.53	-3,940.34	-547.24	0.00	0.00	0.00	0.00	EM 1G36-9-17 Target

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,824.93	0.00	0.00	4,824.93	0.00	0.00	0.00	0.00	0.00	0.00
5,590.77	91.90	187.91	5,302.13	-488.61	-67.86	493.30	12.00	12.00	0.00
9,077.54	91.90	187.91	5,186.53	-3,940.34	-547.24	3,978.16	0.00	0.00	0.00



QEP Resources, Inc.  
Planning Report



Database:	EDMDB_QEP	Local Co-ordinate Reference:	Well EM 1G36-9-17
Company:	QEP ENERGY (UT)	TVD Reference:	RKB @ 5299.10usft (EST. RKB)
Project:	Eight Mile Flat	MD Reference:	RKB @ 5299.10usft (EST. RKB)
Site:	EM 1G36-9-17	North Reference:	True
Well:	EM 1G36-9-17	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan ver.0		

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
EM 1G36-9-17 Target - plan hits target center - Point	0.00	0.00	5,186.53	-3,940.34	-547.24	7,165,922.327	2,074,548.729	39.981986	-109.950609

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
450.00	450.00	9 5/8"	9-5/8	12-1/4
4,740.00	4,740.00	7"	7	8-3/4

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,700.00	1,700.00	Green River fm		0.00	
3,137.00	3,137.00	Garden Gulch mbr		0.00	
5,354.09	5,252.23	Uteland Butte mbr		1.90	7.91
5,541.91	5,301.26	HP zone		1.90	7.91

CONFIDENTIAL



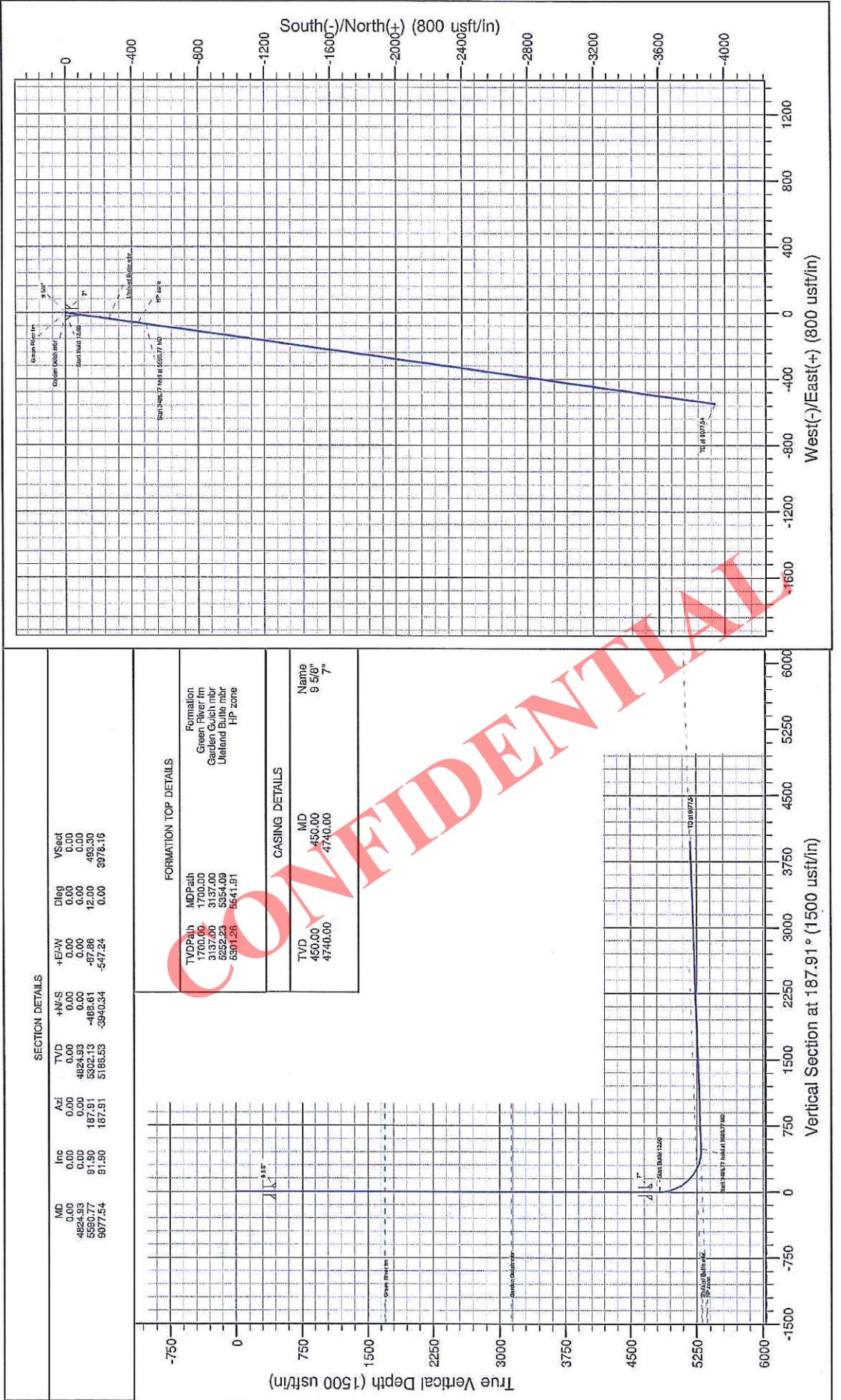
# Company Name: QEP ENERGY (UT)



Project: Eight Mile Flat  
 Well: EM 1G36-9-17  
 Wellbore: Original Hole  
 Design: Plan ver.0

Admiral to True North  
 Magnetic North: 11.17°  
 Magnetic Field  
 Date: 21/02/12  
 Invert (Elevated)

<b>WELL DETAILS: EM 1G36-9-17</b> Original Hole		<b>PROJECT DETAILS: Eight Mile Flat</b>	
+N-S 0.00	+E-W 0.00	Northing 7169877.179	Easting 2075027.500
Ground Level: 5285.10	Latitude 39.952803	Longitude -109.948866	Slot
<b>REFERENCE INFORMATION</b>		<b>Co-ordinate (NED) Reference: Well EM 1G36-9-17, True North</b> <b>Vertical (TVD) Reference: RKB @ 5299.10usft (EST. RKB)</b> <b>Section (VS) Reference: Skt - (0.00N, 0.00E)</b> <b>Measured Depth Reference: RKB @ 5299.10usft (EST. RKB)</b> <b>Calculation Method: Minimum Curvature</b>	
<b>Geodetic System: US State Plane 1983</b> Datum: North American Datum 1983 Ellipsoid: GRS 1980 Zone: Utah Central Zone System Datum: Mean Sea Level			



# T9S, R17E, S.L.B.&M.

## QEP ENERGY COMPANY

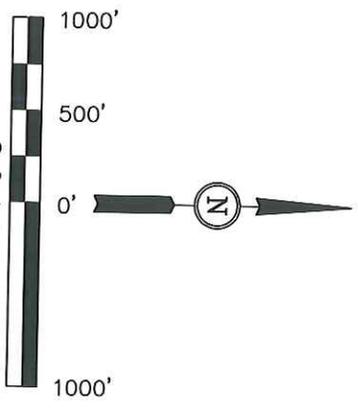
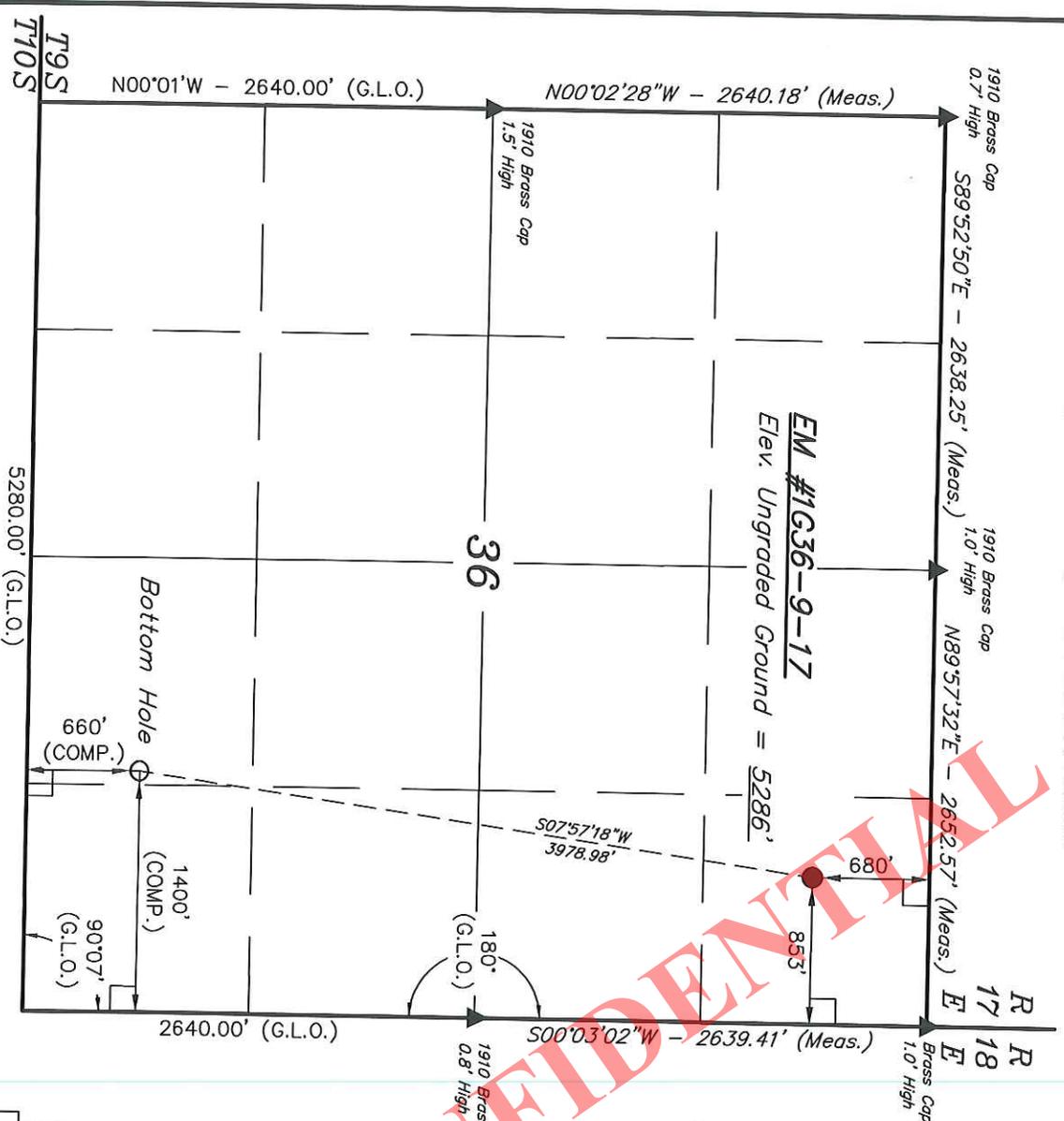
Well location, EM #1G36-9-17, located as shown in the NE 1/4 NE 1/4 of Section 36, T9S, R17E, S.L.B.&M., Uintah County, Utah.

### BASIS OF ELEVATION

SPOT ELEVATION AT THE NORTHWEST CORNER OF SECTION 14, T10S, R18E, S.L.B.&M., TAKEN FROM THE MOON BOTTOM QUADRANGLE, UTAH, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5129 FEET.

### BASIS OF BEARINGS

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



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

**REGISTERED LAND SURVEYOR**  
 STATE OF UTAH  
 REGISTRATION NO. 161319  
 DATE 02-11-12

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

SCALE	1" = 1000'	DATE SURVEYED:	09-14-11	DATE DRAWN:	09-26-11
-------	------------	----------------	----------	-------------	----------

PARTY	A.F. M.H. J.M.H.	REFERENCES	G.L.O. PLAT
WEATHER	WARM	FILE	QEP ENERGY COMPANY

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

NAD 83 (TARGET BOTTOM HOLE)		NAD 83 (SURFACE LOCATION)	
LATITUDE = 39°58'55.15" (39.981986)	LONGITUDE = 109°57'02.19" (109.950608)	LATITUDE = 39°59'34.09" (39.992803)	LONGITUDE = 109°56'55.16" (109.948656)
NAD 27 (TARGET BOTTOM HOLE)		NAD 27 (SURFACE LOCATION)	
LATITUDE = 39°58'55.28" (39.982022)	LONGITUDE = 109°56'59.66" (109.949906)	LATITUDE = 39°59'34.22" (39.992839)	LONGITUDE = 109°56'52.63" (109.947953)

# QEP ENERGY COMPANY

EM #1G36-9-17

LOCATED IN UINTAH COUNTY, UTAH  
SECTION 36, T9S, R17E, S.L.B.&M.

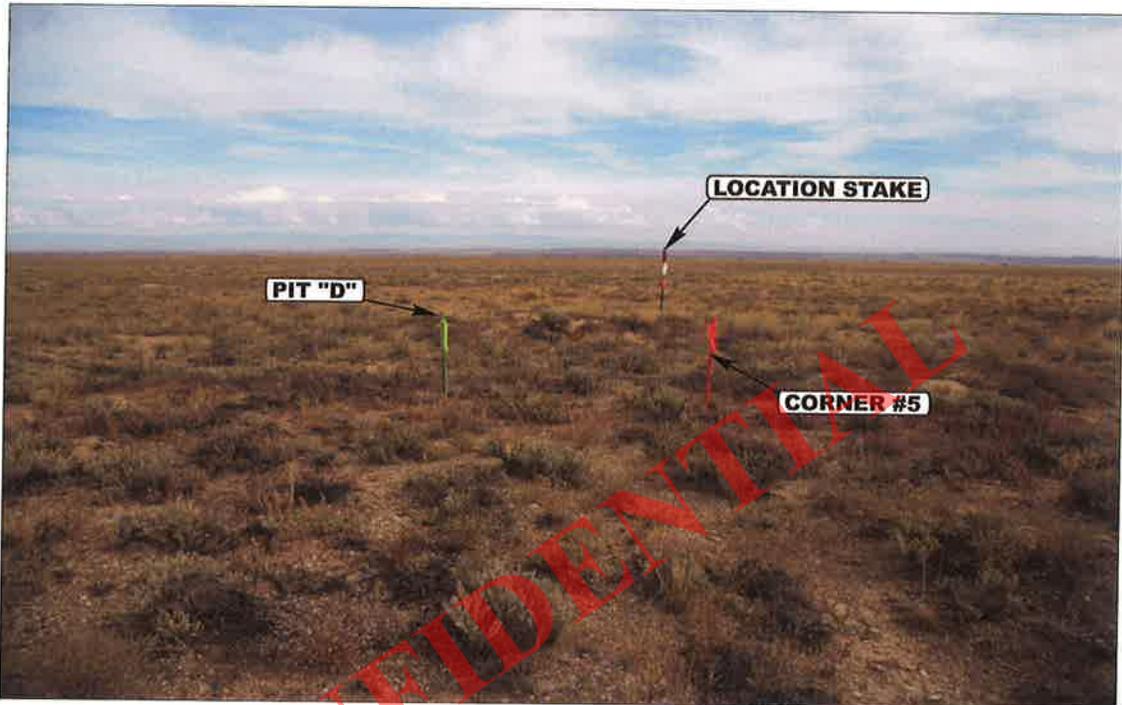


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHERLY

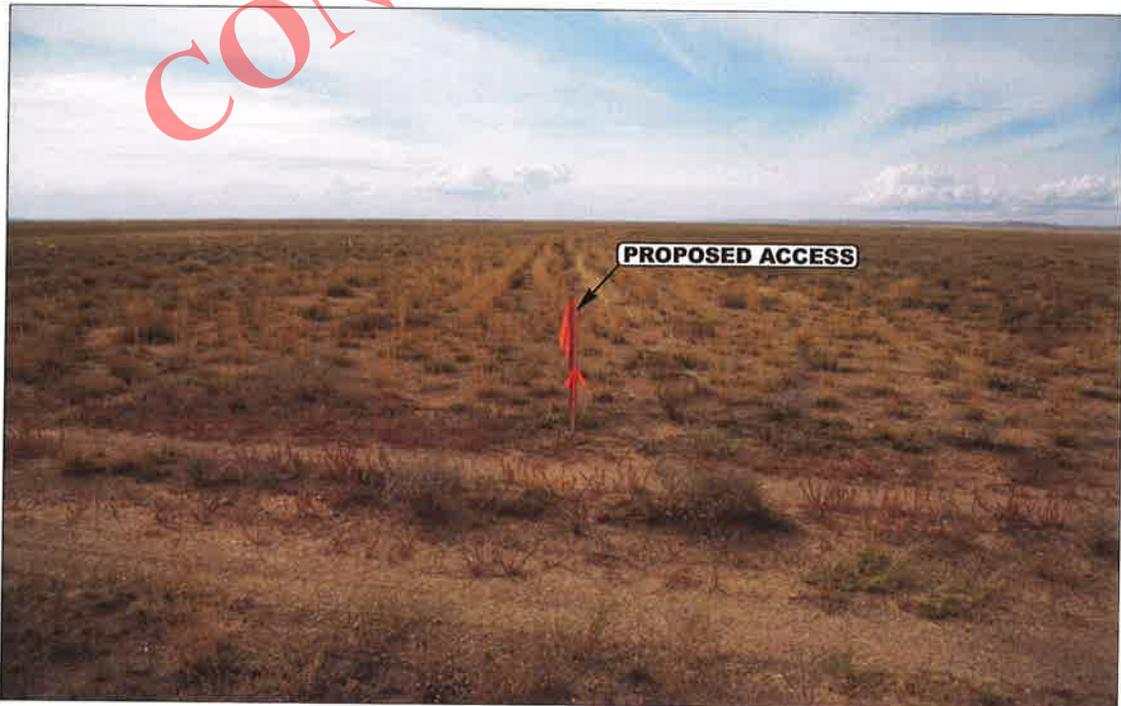


PHOTO: VIEW OF BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: SOUTHERLY



- Since 1964 -

**UELS**

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

LOCATION PHOTOS

09 27 11  
MONTH DAY YEAR

PHOTO

TAKEN BY: A.F.

DRAWN BY: B.D.H.

REVISED: 00-00-00

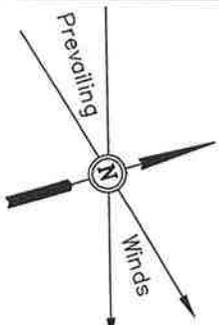
# QEP ENERGY COMPANY

## LOCATION LAYOUT FOR

EM #1G36-9-17  
SECTION 36, T9S, R17E, S.L.B.&M.  
680' FNL 853' FEL

FIGURE #1

SCALE: 1" = 50'  
DATE: 09-26-11  
DRAWN BY: J.M.H.



Ei. 88.5'  
C-3.4'

Ei. 87.5'  
C-2.4'

Ei. 85.5'  
C-0.4'

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

FLARE PIT

Approx. Top of Cut Slope



Ei. 86.7'  
C-16.6'  
(Btm. Pit)

Ei. 86.6'  
C-1.5'

Ei. 85.5'  
C-0.4'

Ei. 86.5'  
C-1.4'

Ei. 84.1'  
F-1.0'

Ei. 86.3'  
C-1.2'

Ei. 86.6'  
C-16.5'  
(Btm. Pit)

RESERVE PIT (15' Deep)

Total Pit Capacity  
W/2' of Freeboard  
= 4,480 Bbls.±  
Total Pit Volume  
= 1,120 Cu. Yds

Ei. 84.7'  
F-0.4'

Existing Balcon State 41-36Y

Ei. 85.5'  
C-0.4'

Ei. 82.9'  
F-2.2'

Proposed Access Road

Elev. Ungraded Ground At Loc. Stake = 5285.5'  
FINISHED GRADE ELEV. AT LOC. STAKE = 5285.1'

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

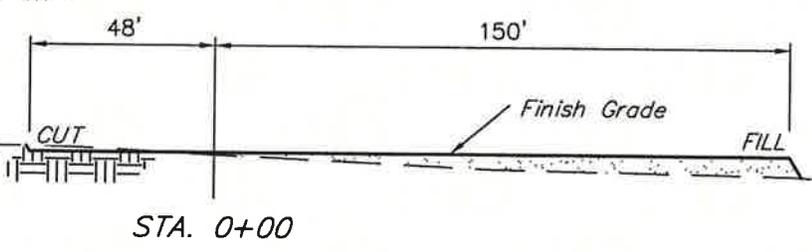
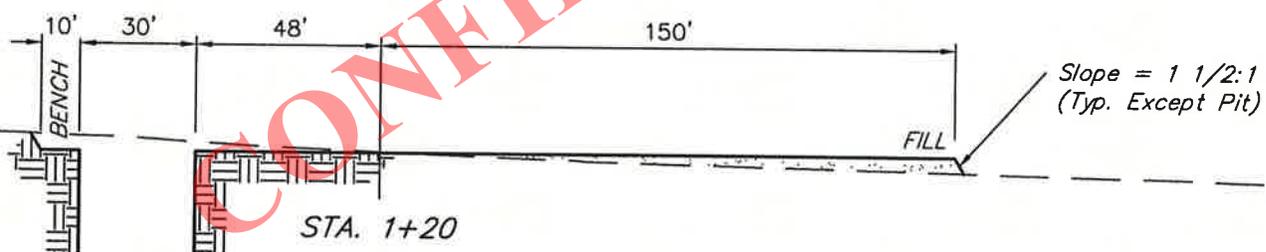
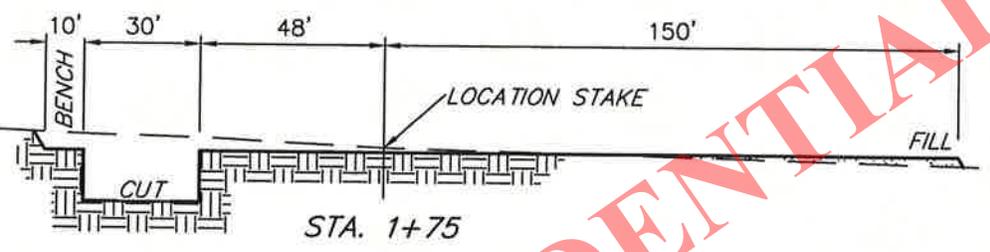
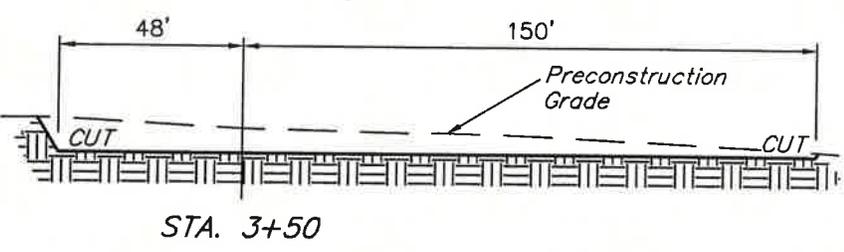
**QEP ENERGY COMPANY**  
**TYPICAL CROSS SECTIONS FOR**

**FIGURE #2**

EM #1G36-9-17  
 SECTION 36, T9S, R17E, S.L.B.&M.  
 680' FNL 853' FEL

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

DATE: 09-26-11  
 DRAWN BY: J.M.H.  
 REVISED: 02-23-12



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

**APPROXIMATE ACREAGES**  
 WELL SITE DISTURBANCE = ± 1.902 ACRES  
 ACCESS ROAD DISTURBANCE = ± 2.016 ACRES  
 TOTAL = ± 3.918 ACRES

**\* NOTE:**  
 FILL QUANTITY INCLUDES 5% FOR COMPACTION

**APPROXIMATE YARDAGES**

(6") Topsoil Stripping	=	1,470 Cu. Yds.
Remaining Location	=	2,310 Cu. Yds.
<b>TOTAL CUT</b>	=	<b>3,780 CU.YDS.</b>
<b>FILL</b>	=	<b>1,750 CU.YDS.</b>

EXCESS MATERIAL	=	2,030 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	=	2,030 Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation)	=	0 Cu. Yds.

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

QEP ENERGY COMPANY

TYPICAL RIG LAYOUT FOR

EM #1G36-9-17

SECTION 36, T9S, R17E, S.L.B.&M.

680' FNL 853' FEL

FIGURE #3

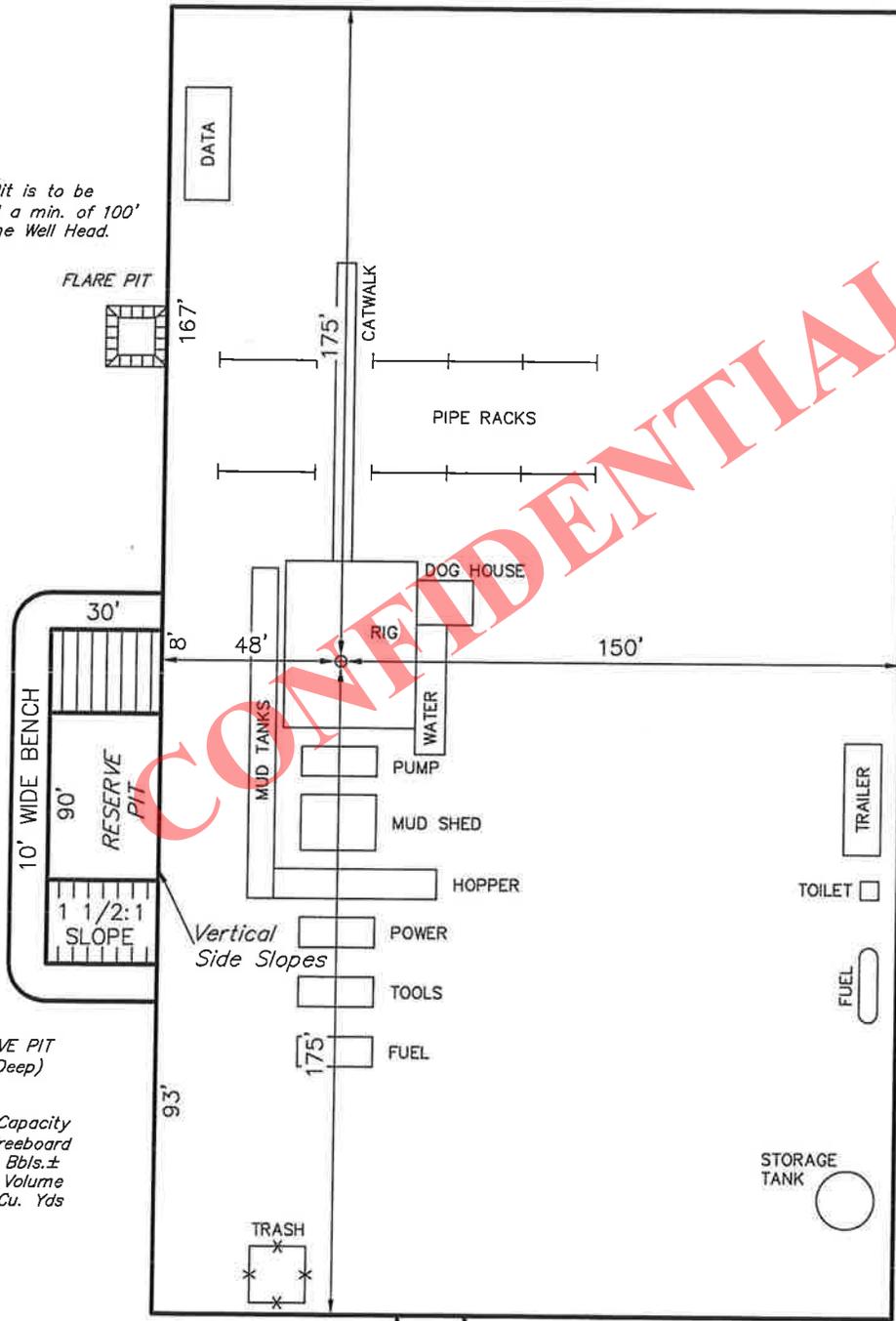
SCALE: 1" = 50'

DATE: 09-26-11

DRAWN BY: J.M.H.



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

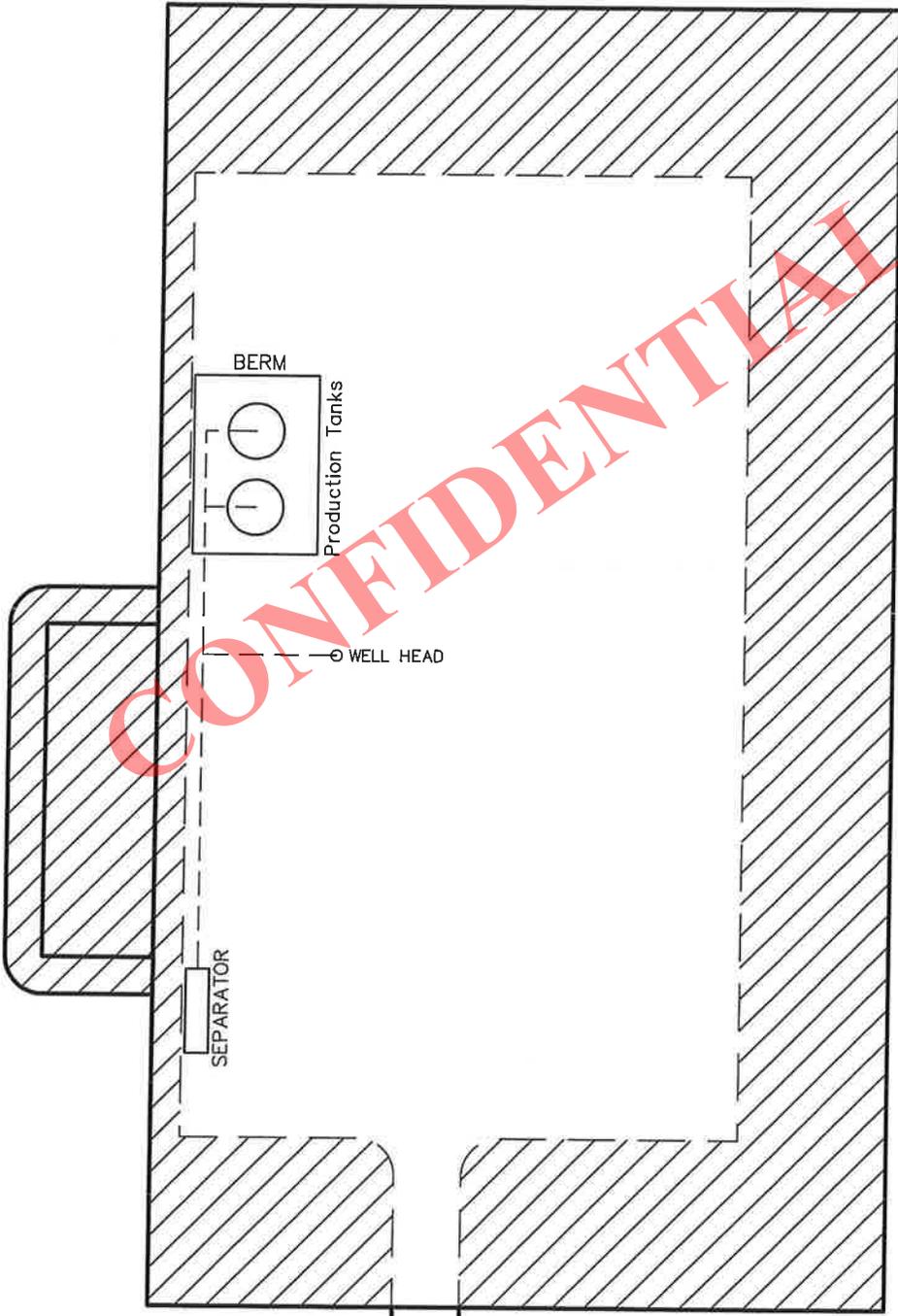


RESERVE PIT  
(15' Deep)

Total Pit Capacity  
W/2' of Freeboard  
= 4,480 Bbls.±  
Total Pit Volume  
= 1,120 Cu. Yds

**QEP ENERGY COMPANY**  
**PRODUCTION FACILITY LAYOUT FOR**  
EM #1G36-9-17  
SECTION 36, T9S, R17E, S.L.B.&M.  
680' FNL 853' FEL

**FIGURE #4**  
SCALE: 1" = 50'  
DATE: 09-26-11  
DRAWN BY: J.M.H.



APPROXIMATE ACREAGES  
UN-RECLAIMED = ± 0.915 ACRES

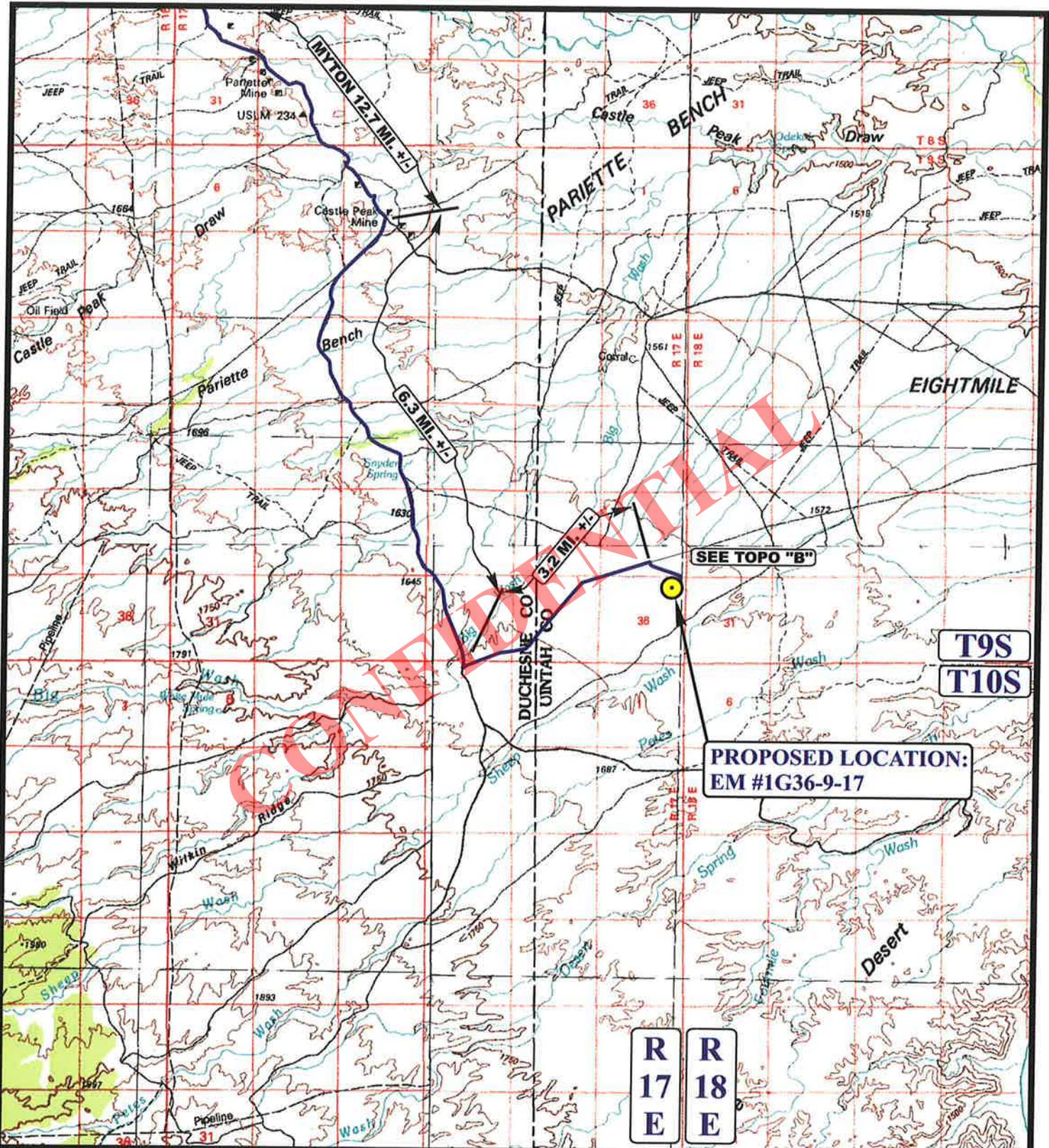
 RECLAIMED AREA

Access Road

**QEP ENERGY COMPANY**  
**EM #1G36-9-17**  
**SECTION 36, T9S, R17E, S.L.B.&M.**

PROCEED IN A WESTERLY DIRECTION FROM MYTON, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 1.5 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTH; TURN LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 11.2 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST; TURN RIGHT AND PROCEED IN A SOUTHWESTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 6.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN LEFT AND PROCEED IN A NORTHEASTERLY DIRECTION APPROXIMATELY 3.2 MILES TO THE BEGINNING OF THE PROPOSED ACCESS FOR THE EM #3G36-9-17 TO THE SOUTH; FOLLOW ROAD FLAGS IN A SOUTHERLY, THEN SOUTHWESTERLY DIRECTION APPROXIMATELY 208' TO THE BEGINNING OF THE PROPOSED ACCESS TO THE SOUTHEAST; FOLLOW ROAD FLAGS IN A SOUTHEASTERLY, THEN SOUTHERLY, THEN SOUTHWESTERLY DIRECTION APPROXIMATELY 2,927' TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM MYTON, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 22.8 MILES.



**LEGEND:**  
 ● PROPOSED LOCATION

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

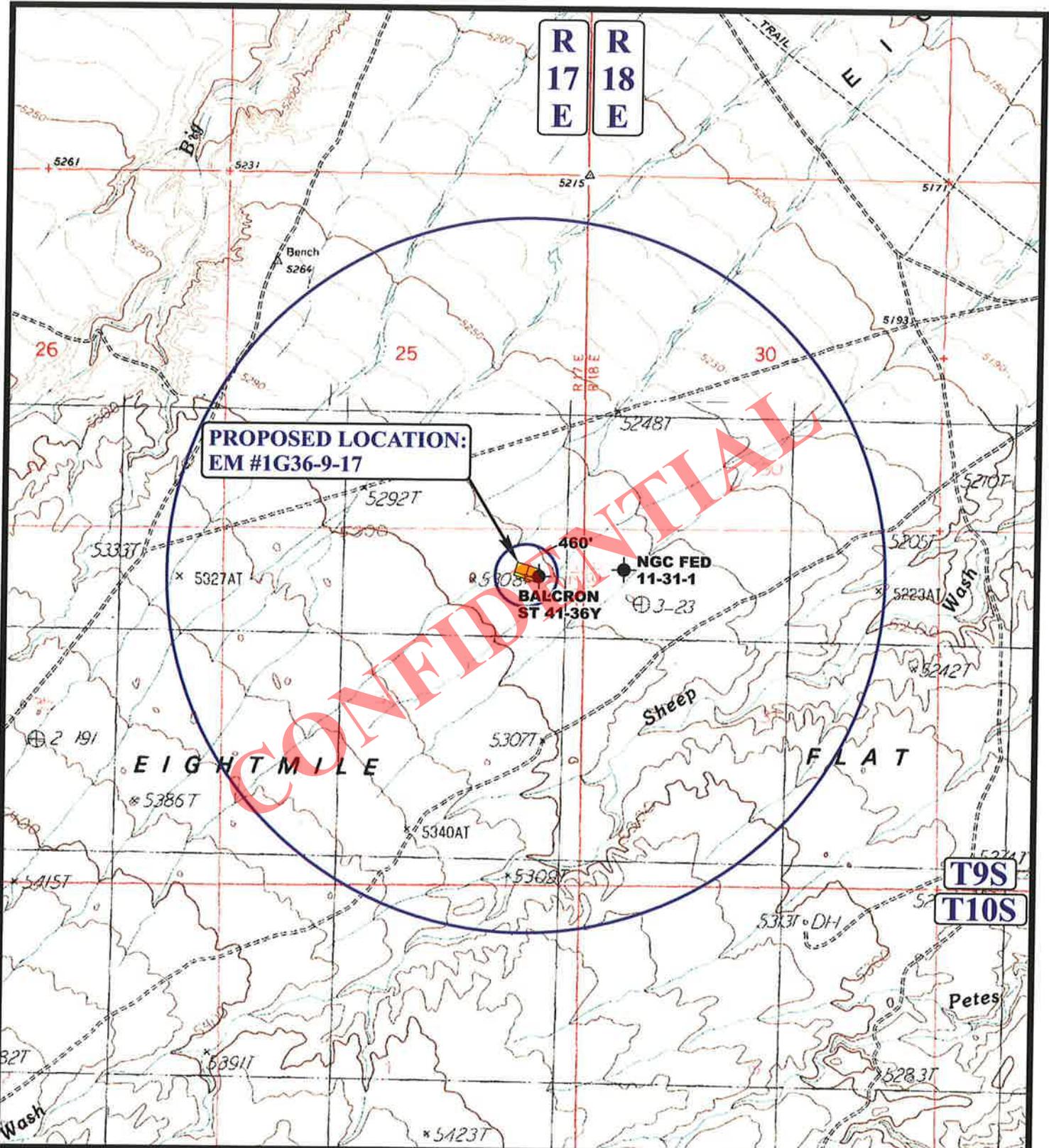


**QEP ENERGY COMPANY**  
 EM #1G36-9-17  
 SECTION 36, T9S, R17E, S.L.B.&M.  
 680' FNL 853' FEL

**ACCESS ROAD MAP**  
 09 27 11  
 MONTH DAY YEAR  
 SCALE: 1:100,000 DRAWN BY: B.D.H. REVISED: 00-00-00







**LEGEND:**

⊙ DISPOSAL WELLS	⊙ WATER WELLS
● PRODUCING WELLS	⊙ ABANDONED WELLS
● SHUT IN WELLS	⊙ TEMPORARILY ABANDONED



**QEP ENERGY COMPANY**

**EM #1G36-9-17**  
**SECTION 36, T9S, R17E, S.L.B.&M.**  
**680' FNL 853' FEL**

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

**TOPOGRAPHIC MAP** **09 27 11**  
 MONTH DAY YEAR  
 SCALE: 1" = 2000' DRAWN BY: B.D.H. REVISED: 00-00-00 **C TOPO**



QEP Energy Company

## **QEP ENERGY (UT)**

**Eight Mile Flat**

**EM 1G36-9-17**

**EM 1G36-9-17**

**Original Hole**

**Plan: Plan ver.0**

## **Standard Planning Report**

**13 February, 2012**

**CONFIDENTIAL**



QEP Energy Company



**QEP Resources, Inc.**  
Planning Report



<b>Database:</b>	EDMDB_QEP	<b>Local Co-ordinate Reference:</b>	Well EM 1G36-9-17
<b>Company:</b>	QEP ENERGY (UT)	<b>TVD Reference:</b>	RKB @ 5299.10usft (EST. RKB)
<b>Project:</b>	Eight Mile Flat	<b>MD Reference:</b>	RKB @ 5299.10usft (EST. RKB)
<b>Site:</b>	EM 1G36-9-17	<b>North Reference:</b>	True
<b>Well:</b>	EM 1G36-9-17	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Hole		
<b>Design:</b>	Plan ver.0		

<b>Project</b>	Eight Mile Flat, Uintah		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Utah Central Zone		Using geodetic scale factor

<b>Site</b>	EM 1G36-9-17				
<b>Site Position:</b>		<b>Northing:</b>	7,169,871.188 usft	<b>Latitude:</b>	39.992803
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,075,027.500 usft	<b>Longitude:</b>	-109.948656
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13-3/16 "	<b>Grid Convergence:</b>	0.99 °

<b>Well</b>	EM 1G36-9-17					
<b>Well Position</b>	<b>+N/-S</b>	-0.01 usft	<b>Northing:</b>	7,169,871.180 usft	<b>Latitude:</b>	39.992803
	<b>+E/-W</b>	0.00 usft	<b>Easting:</b>	2,075,027.500 usft	<b>Longitude:</b>	-109.948656
<b>Position Uncertainty</b>		0.00 usft	<b>Wellhead Elevation:</b>	5,285.10 usft	<b>Ground Level:</b>	5,285.10 usft

<b>Wellbore</b>	Original Hole				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	2/13/2012	11.17	65.76	52,194

<b>Design</b>	Plan ver.0			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	187.91

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,824.93	0.00	0.00	4,824.93	0.00	0.00	0.00	0.00	0.00	0.00	
5,590.77	91.90	187.91	5,302.13	-488.61	-67.86	12.00	12.00	0.00	187.91	
9,077.54	91.90	187.91	5,186.53	-3,940.34	-547.24	0.00	0.00	0.00	0.00	EM 1G36-9-17 Target

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,824.93	0.00	0.00	4,824.93	0.00	0.00	0.00	0.00	0.00	0.00
5,590.77	91.90	187.91	5,302.13	-488.61	-67.86	493.30	12.00	12.00	0.00
9,077.54	91.90	187.91	5,186.53	-3,940.34	-547.24	3,978.16	0.00	0.00	0.00



**QEP Resources, Inc.**  
Planning Report



<b>Database:</b>	EDMDB_QEP	<b>Local Co-ordinate Reference:</b>	Well EM 1G36-9-17
<b>Company:</b>	QEP ENERGY (UT)	<b>TVD Reference:</b>	RKB @ 5299.10usft (EST. RKB)
<b>Project:</b>	Eight Mile Flat	<b>MD Reference:</b>	RKB @ 5299.10usft (EST. RKB)
<b>Site:</b>	EM 1G36-9-17	<b>North Reference:</b>	True
<b>Well:</b>	EM 1G36-9-17	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Hole		
<b>Design:</b>	Plan ver.0		

**Design Targets**

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
EM 1G36-9-17 Target - plan hits target center - Point	0.00	0.00	5,186.53	-3,940.34	-547.24	7,165,922.327	2,074,548.729	39.981986	-109.950609

**Casing Points**

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
450.00	450.00	9 5/8"	9-5/8	12-1/4
4,740.00	4,740.00	7"	7	8-3/4

**Formations**

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,700.00	1,700.00	Green River fm		0.00	
3,137.00	3,137.00	Garden Gulch mbr		0.00	
5,354.09	5,252.23	Uteland Butte mbr		1.90	7.91
5,541.91	5,301.26	HP zone		1.90	7.91

CONFIDENTIAL

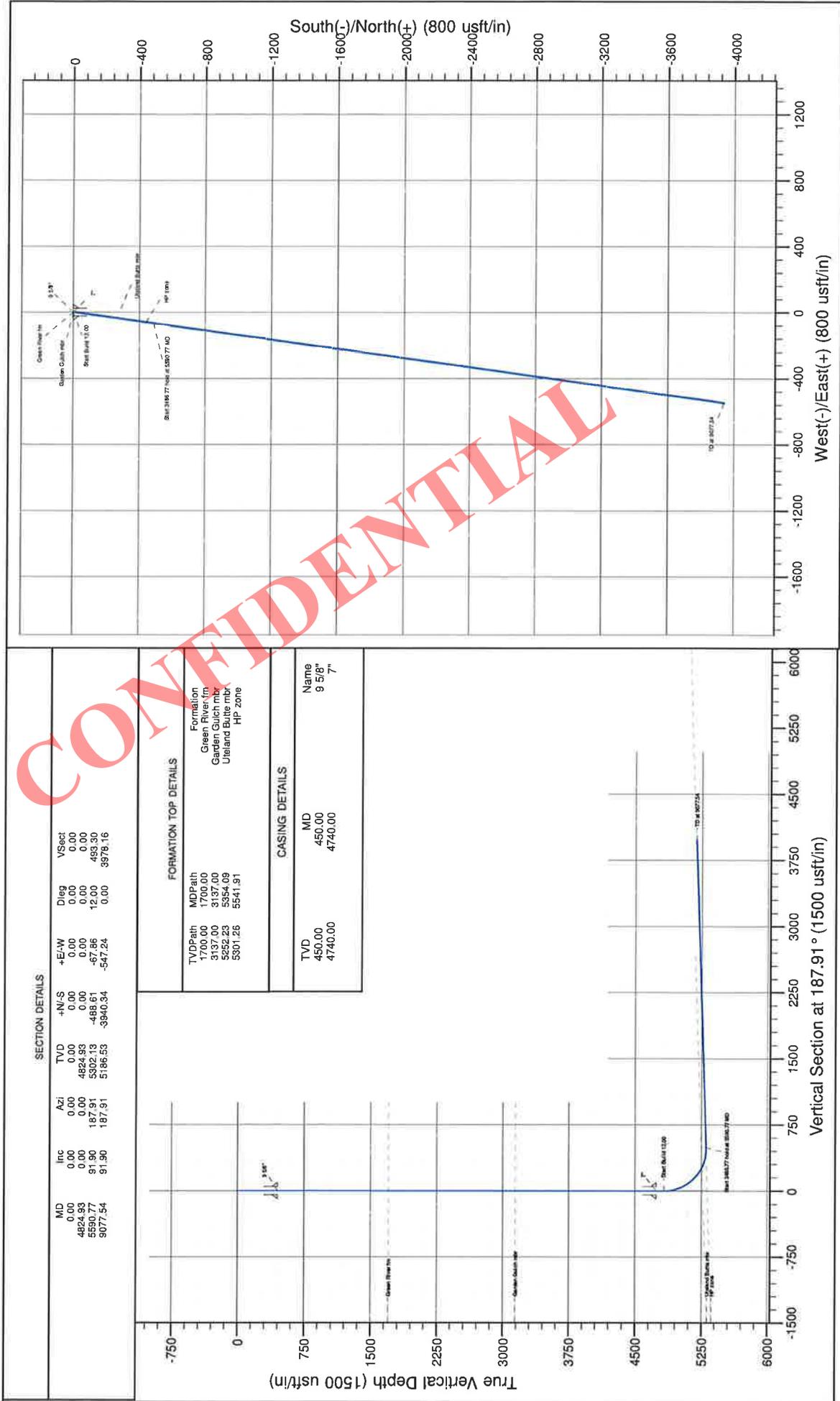


# Company Name: QEP ENERGY (UT)

Annular to True North  
Magnetic Azimuth: 11.17°  
Magnetic Field  
Strength: 52.19 Oersts  
Dip Angle: 62.74°  
Model: 12072010

Project: Eight Mile Flat  
Site: EM 1G36-S-17  
Well: EM 1G36-S-17  
Wellbore: Original Hole  
Design: Plan ver.0

<p>WELL DETAILS: EM 1G36-S-17 Original Hole</p>		<p>REFERENCE INFORMATION</p>		<p>PROJECT DETAILS: Eight Mile Flat</p>	
<p>+E/W 0.00</p>	<p>Northing 7169871.179</p>	<p>Easting 2075027.500</p>	<p>Ground Level: 5285.10</p>	<p>Co-ordinate (N/E) Reference: Well EM 1G36-S-17, True North Vertical Section (V) Reference: RKB @ 5295.10usft (EST. RKB) Section (S) Reference: RKB @ 5298.10usft (EST. RKB) Measured Depth Reference: RKB @ 5298.10usft (EST. RKB) Calculation Method: Minimum Curvature</p>	<p>Geodetic System: US State Plane 1983 Datum: North American Datum 1983 Ellipsoid: GRS 1980 Zone: Utah Central Zone System Datum: Mean Sea Level</p>
<p>+N/S 0.00</p>	<p>Longitude -109.948656</p>	<p>Slot</p>			



**EM 1G-36-9-17  
NENE, SECTION 36, T9S, R17E  
680' FNL, 853' FEL  
UINTAH COUNTY, UT  
LEASE # ML-51206**

**ONSHORE ORDER NO. 1  
MULTI-POINT SURFACE USE & OPERATIONS PLAN**

**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 south of Myton, Utah.  
-See attached TOPO Map "A".

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

Existing 2-track road will be upgraded, maintained and repaired as necessary.

QEP Energy will obtain a right-of-way through the Vernal BLM Office for the portion of the road that travels into state lease. The portion of road that is on BLM lands is approximately 1,980' +/- in length.

**2. Planned Access Roads:**

New access roads on State 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 State.

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.

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.

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.

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.

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.

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

**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 State.

**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. Fresh water may also be

obtained from Neil Moon Pond, water right #43-11787, or Myton City Water, Myton, Utah.

**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.

After first production, produced wastewater will be confined to the approved pit or storage tank for a period not to exceed 90 days.

After the 90 day period, the produced water will be contained in tanks on location and then hauled by truck to the following pre-approved disposal site:

Lapoint Recycle & Storage located in Sec. 12, T5S, R19E, Uintah County, UT.

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 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:**

**Long-Term Reclamation**

Long-term reclamation will be conducted on all disturbed areas no longer required for field operations. This includes unnecessary portions of the well pads after completion and throughout the well's production period, road out slopes, and pipeline corridors. Long-term reclamation will be conducted on pads and roads for non-producing wells and on pads for wells that have reached the end of their productive life (includes facility removal and complete well pad and access road reclamation). Because long-term reclamation will occur throughout the life of the

project, this plan does not differentiate between “interim” and “final” reclamation. All long-term reclamation is considered final unless monitoring shows the need for additional reclamation action. Long-term reclamation will return as much of the well pad as possible to its predisturbance condition as quickly as possible. Long-term reclamation will increase habitat patch sizes and reduce habitat fragmentation for sagebrush obligate species.

### **Temporary Reclamation, Soil Stabilization, and Erosion Control**

Topsoil that will be stored more than 2 years before long-term reclamation begins will be stabilized and windrowed, where possible, to a depth of 2 – 3 feet at a specified location near the margin of the well site as determined at the on-site inspection.

- Windrowed topsoil will then be broadcast-seeded with an approved seed mixture and raked or dragged with a chain, immediately after windrowing.
- Other erosion control techniques will be applied where necessary and may include:
  - diversion ditch design and construction
  - sediment control basin design and construction
  - straw or hay bale check dams
  - rock check dams
  - sediment fence
  - energy dissipaters

All runoff and erosion control structures will be inspected, maintained, and cleaned-out by the Operator on a regular basis throughout the life of the project. Inspections will occur after runoff events (e.g., spring runoff, storm events).

#### Topsoil and Spoil Handling

Topsoil will be salvaged from all proposed disturbance areas and stockpiled separately from subsoil materials. Topsoil salvaged from the reserve pit will be stockpiled separately near the reserve pit.

Topsoil stockpiles will be adequately protected until replaced on the surface during reclamation. Temporary erosion control measures such as temporary vegetation cover, application of mulch, netting, or soil stabilizers may be used in some areas to minimize wind and water erosion and sedimentation prior to vegetation establishment.

### **Surface Preparation**

#### Backfilling, Grading, and Contouring

Areas to be reclaimed will be graded to approximate original contours and to blend in with adjacent topography. Area-wide drainage will be restored so that surface runoff flows and gradients are returned to the condition present prior to development. Graded surfaces will be suitable for the replacement of a uniform depth of topsoil, will promote cohesion between subsoil and topsoil layers, will reduce wind erosion, and will facilitate moisture capture. Specialized grading techniques may be applied, if warranted, and could include slope rounding, bench grading, stair-step grading/terracing, and/or contour furrowing.

Dozers, loaders, scrapers, and motor graders are typically used for backfilling and grading.

### Reserve Pit Evaporation

After the well has been completed and is put into production, the reserve pit will be evaporated. Depending on the time of year and precipitation accumulations, the reserve pit may evaporate naturally. If the reserve pit will not evaporate naturally within one summer season (i.e., June – August) after drilling is completed, alternative evaporation techniques may be applied. Some alternative techniques may include:

- Trickle Systems
- Evaporation Misters and Aerators
- Evaporation Ponds (with approved regulatory filings)
- Pit Solidification
- Water Hauling
  - Haul non-reusable water to an approved disposal facility.
  - Haul or polypipe re-useable water to another reserve pit to be used in the drilling process; water filters may be used if necessary.

Once the reserve pit is as dry as possible, all debris in the pit will be removed. Excess pit liner will be cut off and removed and the remaining liner will be torn and perforated while backfilling the pit. The liner will be buried to a minimum of 4 feet deep. The reserve pit will be backfilled and recontoured to blend with the natural landscape. The reserve pit will be crowned convexly to allow for settling and prevent standing water.

### Ripping and Disking

Compacted areas such as roads and well pads will be ripped to a depth of 12 – 18 inches to improve soil aeration, water infiltration, and root penetration. Ripped areas will be disked, if necessary, to fill in deep furrows (where topsoil would be lost) and break up large clods (to which topsoil will not adhere).

Motor graders or tractors equipped with ripping shanks are typically used for ripping. Ripper shanks will be set approximately 1 – 2 feet apart. Disking is typically accomplished using a tractor-drawn disc set 2 – 6 inches deep.

### **Seedbed Preparation**

Seedbed preparation maximizes seeding efficiency and improves reclamation success. It includes topsoil replacement and various cultivation techniques. Cultivation techniques may include one or more of the following:

- plowing
- chisel plowing
- disking
- chaining
- rotary hoeing
- harrowing
- cultipacking
- extreme surface roughening
- pitting

### **Topsoil Replacement**

Waterbars and erosion control devices will be installed on reclaimed areas prior to topsoil replacement, as necessary, to control topsoil erosion. Stockpiled topsoil will be redistributed uniformly on areas to be reclaimed.

Topsoil is typically replaced using scrapers, dozers, and/or motor graders.

### **Seeding**

Once the topsoil is replaced, seeding will occur generally between September 15 and freeze-up. If fall seeding is not feasible, seeding may occur between spring thaw and May 15. Seeding will not be applied to wet or frozen ground. In this circumstance, seeding will take place when the ground dries or thaws to the point where soils are friable.

Reclaimed areas will be seeded with seed mixtures that will restore disturbed sites so that they closely resemble pre-disturbance plant communities. Seed mixtures will be developed based on the following criteria: general conditions within the analysis area, species adaptations to site condition, usefulness of the species for rapid site stabilization, species success in past revegetation efforts, and seed costs and availability.

The seed mixture and seeding rates will be recommended by the State authorized officer (AO) at the on-site inspection and included in the Application for Permit to Drill (APD) or Right-of-Way (ROW). Alternative species and

seeding rates may be used at the Operator's discretion with State approval, if warranted by site-specific conditions or seed availability, provided that the alternative species/seeding rates facilitate achieving reclamation success and all modifications are documented.

Seed mixtures will be certified weed-free.

Seed will be drilled on the contour to an appropriate depth. When drill-seeding is not practical due to steep slopes or rocky surfaces, seeding rates would be doubled, seed would be broadcast, and the area would be raked, "walked" with tracked equipment, or dragged with a chain or harrow to cover seed.

### **Mulching**

Dry mulch may be considered as one method to enhance the reestablishment of desired plant communities. Where mulching is deemed appropriate, the reclaimed area will be uniformly mulched with certified weed-free grass, hay, small grain straw, wood fiber, and/or live mulch at a rate of 1.5 - 2 tons/acre. Alternatively, cotton, jute, or synthetic netting could be applied. Mulch will be crimped into the soil, tackified, or incorporated into erosion control blankets to prevent it from blowing or washing away and from entering waterways. Mulch will protect the soil from wind and water erosion, raindrop impact, and surface runoff and will help to hold seeds in place.

Alternative mulching techniques may be considered on steep slopes where it is unsafe to operate equipment, at sites where soils have 35 percent or more surface rock content, or on notably unstable areas. Alternative techniques may include hydromulch, biodegradable erosion control netting, or matting and will be firmly attached to the surface.

### **Monitoring**

QEP will monitor the success of interim and final reclamation. QEP will monitor the success of reclamation with documentation for 3 years. If QEP and an authorized officer for the State determine the reclamation has not been successful after the second growing season, QEP will take remedial action.

### **Debris**

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

### **Weed Control**

The Operator will be responsible for noxious and invasive weed control from all

project activities for the life of project. If use of herbicides is deemed necessary by Operators, a Pesticide Use Permit will be submitted for approval to the BLM. Herbicides will be used only in the season or growth stage during which they are most effective. Herbicides will be applied only by certified personnel using approved precautionary and application procedures in compliance with all applicable federal, state, and local regulations. Herbicides will not be used within 100 feet of open water or during extremely windy conditions. Aerial application of herbicides will be prohibited within 0.25 mile of known special status plant species locations and hand application of herbicides will not occur within 500 feet of such occurrences. Certified weed-free seed mixtures and mulches will be used, thereby minimizing the potential for noxious weed introduction. Mowing may be considered as an alternative to herbicide applications. Mowing would be implemented prior to seed head establishment or bloom.

A weed control program will be applied to all existing and proposed access roads, pipeline ROWs, and well pads. Weed control involves annual treatments that are monitored and continued until desirable vegetation out-competes invasive or noxious weeds.

#### **Dry Hole/Abandoned Location**

On lands administered by the State, 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 State, the Operator will request a bond release.

#### **12. Surface Ownership:**

The well pad and access road are located on lands owned by:  
State of Utah  
Trust Lands Administration  
675 East, 500 South – Suite 500  
Salt Lake City, UT. 84102

13. **Other Information:**

A Class III archaeological survey was conducted by Montgomery Archaeology Consultants. A copy of the report was submitted directly to the appropriate agencies by Montgomery Archaeology Consultants. The report has been assigned **State of Utah Antiquities Project 11-U-MQ-1141b,s**. Cultural resource clearance has been recommended for this project. If these surveys identify areas with a high probability of encountering potentially significant subsurface archaeological sites, QEP would provide a qualified archaeologist to monitor surface disturbance. If historic or archaeological materials are uncovered during construction, the Operator is to immediately stop work that might further disturb such materials and contact the Authorized Officer.

A Class III paleontological survey was conducted by Intermountain Paleo Consulting. A copy of this report was submitted on November 16, 2011, **Report No. IPC 11-167**. The inspection resulted in the location of no fossil resources. However, if vertebrate fossil(s) are found during construction a paleontologist should be immediately notified. QEP will provide Paleo monitor if needed.

CONFIDENTIAL

**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 for lease activities is being provided by Bond No. 965010695

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

2/24/2012  
\_\_\_\_\_  
Date

**From:** Jim Davis <jimdavis1@utah.gov>  
**To:** Ed Bonner <edbonner@utah.gov>, LaVonne Garrison <lavonnegarrison@utah.go...>  
**CC:** Jan Nelson <Jan.Nelson@qepres.com>  
**Date:** 6/11/2012 12:26 PM  
**Subject:** APD approvals (2 for QEP)

The following APDs have been approved by SITLA including arch and paleo clearance. The approval of the EM 3G-36-9-17 is conditioned upon a permitted paleontologist being on-site to monitor the construction of that well location. There is no paleo stipulation on the EM 1G-36-9-17.

EM 1G-36-9-17 (4304752400)

EM 3G-36-9-17 (4304752399)

Thanks.

-Jim

--

jimdavis1@utah.gov

(801) 538-5156

**CONFIDENTIAL**

BOPE REVIEW QEP ENERGY COMPANY EM 1G-36-9-17 43047524000000

Well Name	QEP ENERGY COMPANY EM 1G-36-9-17 43047524000000			
String	SURF	PROD		
Casing Size(")	9.625	7.000	4.500	
Setting Depth (TVD)	500	4740	5300	
Previous Shoe Setting Depth (TVD)	0	500	4740	
Max Mud Weight (ppg)	8.3	9.5	9.5	
BOPE Proposed (psi)	500	3000	3000	
Casing Internal Yield (psi)	3520	7240	7780	
Operators Max Anticipated Pressure (psi)	2342		8.5	

Calculations	SURF String		9.625	"
Max BHP (psi)	.052*Setting Depth*MW=		216	
				BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=		156	YES <input type="checkbox"/> air drill
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=		106	YES <input type="checkbox"/> OK
				*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=		106	NO <input type="checkbox"/> OK
Required Casing/BOPE Test Pressure=			500	psi
*Max Pressure Allowed @ Previous Casing Shoe=			0	psi *Assumes 1psi/ft frac gradient

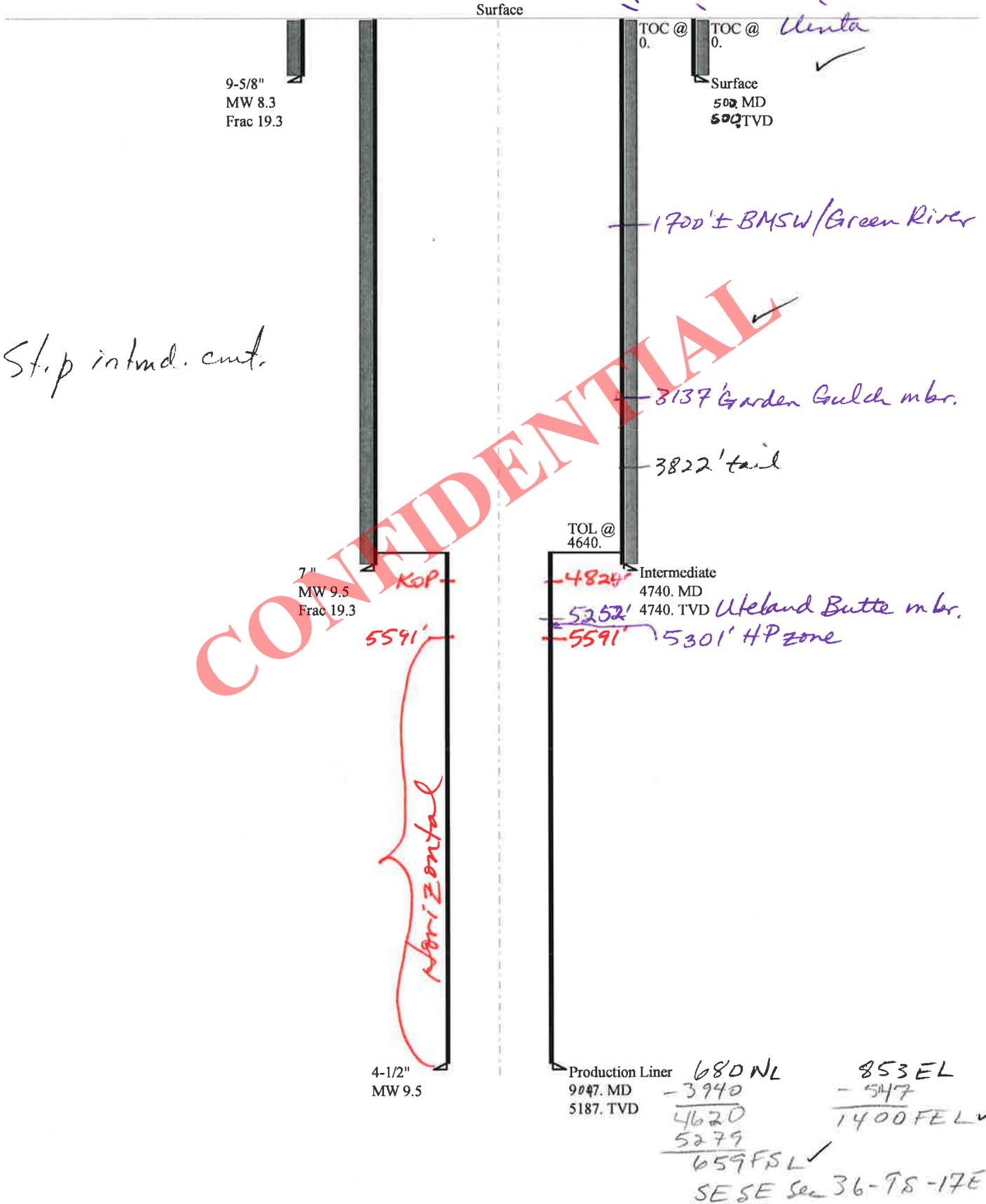
Calculations	PROD String		7.000	"
Max BHP (psi)	.052*Setting Depth*MW=		2342	
				BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=		1773	YES <input type="checkbox"/>
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=		1299	YES <input type="checkbox"/> OK
				*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=		1409	NO <input type="checkbox"/> Reasonable
Required Casing/BOPE Test Pressure=			3000	psi
*Max Pressure Allowed @ Previous Casing Shoe=			500	psi *Assumes 1psi/ft frac gradient

Calculations	String		4.500	"
Max BHP (psi)	.052*Setting Depth*MW=		2618	
				BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=		1982	YES <input type="checkbox"/>
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=		1452	YES <input type="checkbox"/> OK
				*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=		2495	YES <input type="checkbox"/>
Required Casing/BOPE Test Pressure=			3000	psi
*Max Pressure Allowed @ Previous Casing Shoe=			4740	psi *Assumes 1psi/ft frac gradient

Calculations	String			"
Max BHP (psi)	.052*Setting Depth*MW=			
				BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=			NO <input type="checkbox"/>
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=			NO <input type="checkbox"/>
				*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=			NO <input type="checkbox"/>
Required Casing/BOPE Test Pressure=				psi
*Max Pressure Allowed @ Previous Casing Shoe=				psi *Assumes 1psi/ft frac gradient

# 43047524000000 EM 1G-36-9-17

## Casing Schematic



Well name:	<b>43047524000000 EM 1G-36-9-17</b>		
Operator:	<b>QEP ENERGY COMPANY</b>		
String type:	Surface	Project ID:	43-047-52400
Location:	DUCHESNE COUNTY		

**Design parameters:**

**Collapse**

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

**Minimum design factors:**

**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 74 °F  
Bottom hole temperature: 81 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 100 ft

Cement top: Surface

**Burst**

Max anticipated surface pressure: 440 psi  
Internal gradient: 0.120 psi/ft  
Calculated BHP 500 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.70 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.50 (B)

Tension is based on air weight.  
Neutral point: 438 ft

**Non-directional string.**

**Re subsequent strings:**

Next setting depth: 4,740 ft  
Next mud weight: 9.500 ppg  
Next setting BHP: 2,339 psi  
Fracture mud wt: 19.250 ppg  
Fracture depth: 500 ft  
Injection pressure: 500 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	500	9.625	36.00	J-55	ST&C	500	500	8.796	4345
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	216	2020	9.338	500	3520	7.04	18	394	21.89 J

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

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

Date: July 13, 2012  
Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 500 ft, a mud weight of 8.33 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:	<b>4304752400000 EM 1G-36-9-17</b>		
Operator:	<b>QEP ENERGY COMPANY</b>		
String type:	Intermediate	Project ID:	43-047-52400
Location:	DUCHESNE COUNTY		

**Design parameters:**

**Collapse**

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

**Minimum design factors:**

**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
 Surface temperature: 74 °F  
 Bottom hole temperature: 140 °F  
 Temperature gradient: 1.40 °F/100ft  
 Minimum section length: 1,000 ft

Cement top: Surface

**Burst**

Max anticipated surface pressure: 1,419 psi  
 Internal gradient: 0.220 psi/ft  
 Calculated BHP 2,461 psi

No backup mud specified.

**Tension:**

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

Tension is based on air weight.  
 Neutral point: 4,061 ft

**Non-directional string.**

**Re subsequent strings:**

Next setting depth: 5,187 ft  
 Next mud weight: 9.500 ppg  
 Next setting BHP: 2,560 psi  
 Fracture mud wt: 19.250 ppg  
 Fracture depth: 4,740 ft  
 Injection pressure: 4,740 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	4740	7	26.00	N-80	LT&C	4740	4740	6.151	42140
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	2339	5410	2.313	2461	7240	2.94	123.2	519	4.21 J

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

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

Date: July 6, 2012  
 Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 4740 ft, a mud weight of 9.5 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:	<b>43047524000000 EM 1G-36-9-17</b>		
Operator:	<b>QEP ENERGY COMPANY</b>		
String type:	Production Liner	Project ID:	43-047-52400
Location:	DUCHESNE COUNTY		

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

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

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

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 74 °F  
Bottom hole temperature: 147 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 1,000 ft

**Burst**

Max anticipated surface pressure: 1,419 psi  
Internal gradient: 0.220 psi/ft  
Calculated BHP 2,560 psi

No backup mud specified.

**Tension:**

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

Tension is based on air weight.  
Neutral point: 5,125 ft

Liner top: 4,640 ft

**Directional well information:**

Kick-off point: 4825 ft  
Departure at shoe: 3948 ft  
Maximum dogleg: 12 °/100ft  
Inclination at shoe: 91.9 °

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	4447	4.5	11.60	N-80	LT&C	5188	9047	3.875	18315
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	2560	6350	2.480	2585	7780	3.01	6.8	223	32.72 J

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

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

Date: July 13, 2012  
Salt Lake City, Utah

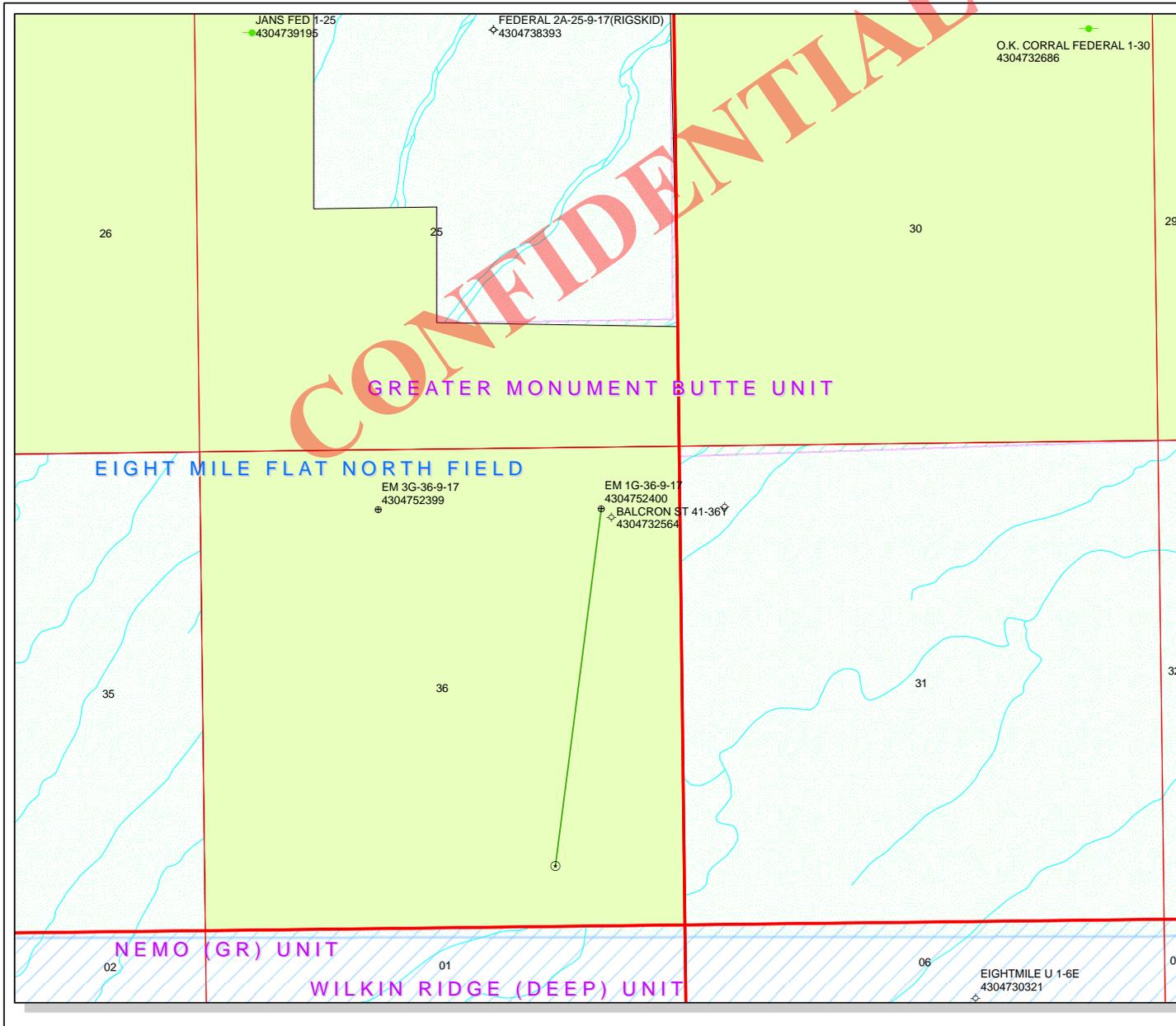
**Remarks:**

For this liner string, the top is rounded to the nearest 100 ft. Collapse is based on a vertical depth of 5188 ft, a mud weight of 9.5 ppg. The Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

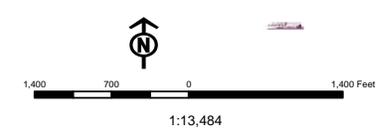
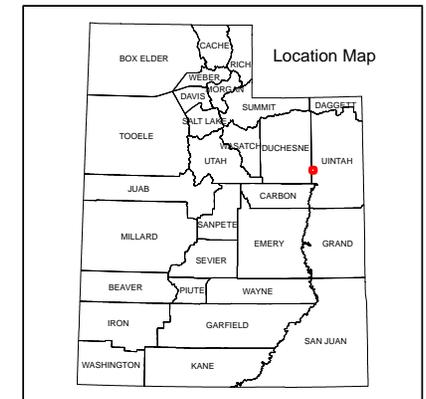
*Engineering responsibility for use of this design will be that of the purchaser.*



**API Number: 4304752400**  
**Well Name: EM 1G-36-9-17**  
**Township T09.0S Range R17.0E Section 36**  
**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	DRIL - 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>	<b>STATUS</b>
ABANDONED	TA - Temp. Abandoned
ACTIVE	TW - Test Well
COMBINED	WDW - Water Disposal
INACTIVE	WW - Water Injection Well
STORAGE	WSW - Water Supply Well
TERMINATED	Bottom Hole Location - Oil/Gas/Dls



# ON-SITE PREDRILL EVALUATION

## Utah Division of Oil, Gas and Mining

**Operator** QEP ENERGY COMPANY  
**Well Name** EM 1G-36-9-17  
**API Number** 43047524000000      **APD No** 5363    **Field/Unit** EIGHT MILE FLAT  
**Location: 1/4,1/4** NENE    **Sec** 36    **Tw** 9.0S    **Rng** 17.0E    680 FNL 853 FEL  
**GPS Coord (UTM)** 589752 4427491      **Surface Owner**

### Participants

Jan Nelson, Stephanie Tompkinson, Erick Wickersham, Ryan Angus and Valyn Davis (QEP), Brandon Bowthorpe (UELS), Jim Davis (SITLA), Katie Nash (BLM)

### Regional/Local Setting & Topography

This location is flat as is the area around it for hundreds of feet. This site is approximately 1.5 miles east of the Duchesne/Uintah county line on the Eight Mile Flat, Roosevelt, Utah is approximately 21 miles due north.

### Surface Use Plan

**Current Surface Use**  
Wildlfe Habitat

New Road Miles	Well Pad Width	Const Material Onsite	Surface Formation UNTA
0.55	198' Length 350'		

**Ancillary Facilities** N

**Waste Management Plan Adequate?** Y

### Environmental Parameters

**Affected Floodplains and/or Wetlands** N

#### **Flora / Fauna**

Small sage, bunch grass, needle and thread, prickly pear, other shrubs and grasses.

Vegetation available to support some grazing

#### **Soil Type and Characteristics**

Sandy clay loam, gravel sprinkled on surface.

**Erosion Issues** N

**Sedimentation Issues** N

**Site Stability Issues** N

**Drainage Diverson Required?** N

**Berm Required?** N

**Erosion Sedimentation Control Required? N****Paleo Survey Run? N    Paleo Potential Observed? N    Cultural Survey Run? Y    Cultural Resources? N****Reserve Pit****Site-Specific Factors****Site Ranking**

<b>Distance to Groundwater (feet)</b>	>200	0
<b>Distance to Surface Water (feet)</b>	>1000	0
<b>Dist. Nearest Municipal Well (ft)</b>	>5280	0
<b>Distance to Other Wells (feet)</b>		20
<b>Native Soil Type</b>	Mod permeability	10
<b>Fluid Type</b>	TDS>5000 and	10
<b>Drill Cuttings</b>	Normal Rock	0
<b>Annual Precipitation (inches)</b>		0
<b>Affected Populations</b>		
<b>Presence Nearby Utility Conduits</b>	Not Present	0
<b>Final Score</b>		40    1 Sensitivity Level

**Characteristics / Requirements**

The reserve pit is 90' x 30'. QEP stated their intention to use a 20 mil liner. This will be adequate for this site.

**Closed Loop Mud Required? N    Liner Required? Y    Liner Thickness 20    Pit Underlayment Required? Y**

**Other Observations / Comments**

The UTM's are off quite a bit.

Richard Powell  
Evaluator

4/11/2012  
Date / Time

**Application for Permit to Drill  
Statement of Basis  
Utah Division of Oil, Gas and Mining**

<b>APD No</b>	<b>API WellNo</b>	<b>Status</b>	<b>Well Type</b>	<b>Surf Owner</b>	<b>CBM</b>
5363	43047524000000	LOCKED	OW	S	No
<b>Operator</b>	QEP ENERGY COMPANY		<b>Surface Owner-APD</b>		
<b>Well Name</b>	EM 1G-36-9-17		<b>Unit</b>		
<b>Field</b>	EIGHT MILE FLAT		<b>Type of Work</b>	DRILL	
<b>Location</b>	NENE 36 9S 17E S 680 FNL (UTM) 589754E 4427488N		853 FEL GPS Coord		

**Geologic Statement of Basis**

QEP proposes to set 450' of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 1,700'. A search of Division of Water Rights records shows 1 water well within a 10,000 foot radius of the center of Section 36. The well is shown as producing from a depth of 300 feet and is listed for domestic use. The well is approximately 1.5 miles from the proposed location. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. Production casing cement should be brought up above the base of the moderately saline ground water in order to isolate it from fresher water up hole.

Brad Hill  
APD Evaluator

6/28/2012  
Date / Time

**Surface Statement of Basis**

This location is on state (SITLA) surface with state minerals. SITLA representative Jim Davis attended this onsite inspection and stated that he had no concerns or requests for this site. DWR representative Ben Williams was invited but did not attend. Mr. Williams stated that as the DWR representative there are no wildlife concerns with this well site. QEP plans to use a 20 mil liner. It was agreed that a felt subliner should be used based on the presence of so much gravel on the surface. There is a P/A well next to the east side of this location. The P/A is the Balcron State-36Y and the old location is overlapped but the P/A marker is just of this new proposed location.

Richard Powell  
Onsite Evaluator

4/11/2012  
Date / Time

**Conditions of Approval / Application for Permit to Drill**

<b>Category</b>	<b>Condition</b>
Pits	A synthetic liner with a minimum thickness of 20 mils with a felt subliner shall be properly installed and maintained in the reserve pit.
Surface	The reserve pit shall be fenced upon completion of drilling operations.

## WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 2/24/2012

API NO. ASSIGNED: 43047524000000

WELL NAME: EM 1G-36-9-17

OPERATOR: QEP ENERGY COMPANY (N3700)

PHONE NUMBER: 435 781-4331

CONTACT: Jan Nelson

PROPOSED LOCATION: NENE 36 090S 170E

Permit Tech Review: 

SURFACE: 0680 FNL 0853 FEL

Engineering Review: 

BOTTOM: 0660 FSL 1400 FEL

Geology Review: 

COUNTY: UINTAH

LATITUDE: 39.99281

LONGITUDE: -109.94864

UTM SURF EASTINGS: 589754.00

NORTHINGS: 4427488.00

FIELD NAME: EIGHT MILE FLAT

LEASE TYPE: 3 - State

LEASE NUMBER: ML51206

PROPOSED PRODUCING FORMATION(S): UTELAND BUTTE

SURFACE OWNER: 3 - State

COALBED METHANE: NO

## RECEIVED AND/OR REVIEWED:

- PLAT
- Bond: STATE - 965010695
- Potash
- Oil Shale 190-5
- Oil Shale 190-3
- Oil Shale 190-13
- Water Permit: A36125/ 49-2153/ 43-11787
- RDCC Review:
- Fee Surface Agreement
- Intent to Commingle

Commingling Approved

## LOCATION AND SITING:

- R649-2-3.
- Unit:
- R649-3-2. General
- R649-3-3. Exception
- Drilling Unit
- Board Cause No: R649-3-2.6
- Effective Date:
- Siting:
- R649-3-11. Directional Drill

Comments: Presite Completed  
TEMP 640 ACRE SPACING:

Stipulations: 5 - Statement of Basis - bhill  
12 - Cement Volume (3) - hmacdonald  
23 - Spacing - dmason  
26 - Temporary Spacing - dmason  
27 - Other - bhill



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:** EM 1G-36-9-17  
**API Well Number:** 43047524000000  
**Lease Number:** ML51206  
**Surface Owner:** STATE  
**Approval Date:** 8/9/2012

### 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 R649-3-2.6. The expected producing formation or pool is the UTELAND BUTTE 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:

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.

A temporary 640 acre spacing unit is hereby established in Section 36, Township 9S, Range 17E, SLBM for the drilling of this well (R649-3-2.6). No other horizontal wells may be drilled in this section unless approved by the Board of Oil, Gas and Mining.

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

Cement volume for the 7" intermediate string shall be determined from actual hole diameter in order to place cement from the pipe setting depth back to surface as indicated in the submitted drilling plan.

In accordance with Utah Admin. R.649-3-21, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

**Additional Approvals:**

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

- Any changes to the approved drilling plan - contact Dustin Doucet
- Significant plug back of the well - contact Dustin Doucet
- Plug and abandonment of the well - contact Dustin Doucet

**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  
OR  
submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website  
at <http://oilgas.ogm.utah.gov>
- 24 hours prior to testing blowout prevention equipment - contact Dan Jarvis
- 24 hours prior to cementing or testing casing - contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling program  
- contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well - contact Dan Jarvis

**Contact Information:**

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

- Carol Daniels 801-538-5284 - office
- Dustin Doucet 801-538-5281 - office  
801-733-0983 - after office hours
- Dan Jarvis 801-538-5338 - office  
801-231-8956 - after office hours

**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", written in a cursive style.

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.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> ML51206
		<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> EM 1G-36-9-17
<b>3. ADDRESS OF OPERATOR:</b> 11002 East 17500 South , Vernal, Ut, 84078		<b>9. API NUMBER:</b> 43047524000000
<b>PHONE NUMBER:</b> 303 308-3068 Ext		<b>9. FIELD and POOL or WILDCAT:</b> EIGHT MILE FLAT
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0680 FNL 0853 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NENE Section: 36 Township: 09.0S Range: 17.0E 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: 1/7/2013	<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 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.

ON 1/07/2013, QEP ENERGY COMPANY SET 40' OF 16" CONDUCTOR PIPE AND CEMENTED IT WITH READY MIX.

**Accepted by the  
Utah Division of  
Oil, Gas and Mining  
FOR RECORD ONLY  
January 14, 2013**

<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> 1/8/2013	

BLM - Vernal Field Office - Notification Form

Operator QEP Rig Name/# PETE MARTIN Submitted  
By ERIC WICKERSHAM Phone Number 13077053920  
Well Name/Number EM 1G-36-9-17  
Qtr/Qtr NENE Section 36 Township 9 S Range 17 E  
Lease Serial Number ML 51206  
API Number 43-047-52400

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

Date/Time <sup>1-9-13</sup> 1-9-13 <sup>11:00</sup> 0800 AM  PM  (*Broke down*)

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 SET 40FT OF 16" CONDUCTOR

RECEIVED

JAN 04 2013

DIV. OF OIL, GAS & MINING

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

FORM 6

**ENTITY ACTION FORM**

Operator: QEP ENERGY COMPANY Operator Account Number: N 3700  
 Address: 11002 EAST 17500 SOUTH  
city VERNAL  
state UT zip 84078 Phone Number: (435) 781-4369

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304752400	EM 1G-36-9-17		NENE	36	9S	17E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
A	99999	19860	1/7/2013		1-14-2013		
Comments: <u>GRRV</u> <u>BHL: SUSE</u>							

**CONFIDENTIAL**

Well 2

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

Well 3

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

**ACTION CODES:**

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

**RECEIVED**

JAN 14 2013

Valyn Davis

Name (Please Print)

Signature

Regulatory Affairs Analyst

Title

1/14/2013

Date



<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>		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> ML51206
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>
<b>1. TYPE OF WELL</b> Oil Well	<b>8. WELL NAME and NUMBER:</b> EM 1G-36-9-17	
<b>2. NAME OF OPERATOR:</b> QEP ENERGY COMPANY	<b>9. API NUMBER:</b> 43047524000000	
<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> EIGHT MILE FLAT
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0680 FNL 0853 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NENE Section: 36 Township: 09.0S Range: 17.0E 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: <b>3/7/2013</b>  <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 MARCH 7, 2013 @ 6:00 P.M.</b>		
		<b>Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY March 12, 2013</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> 3/11/2013	

RECEIVED

MAR 26 2013

AMENDED REPORT  FORM 8  
(highlight changes)

DIV OF OIL GAS & MINING

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. LEASE DESIGNATION AND SERIAL NUMBER:  
ML51206

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT or CA AGREEMENT NAME

8. WELL NAME and NUMBER:  
EM 1G-36-9-17

9. API NUMBER:  
4304752400

10. FIELD AND POOL, OR WILDCAT  
EIGHT MILE FLAT

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:  
NENE 36 9S 17E

12. COUNTY  
UINTAH

13. STATE  
UTAH

14. DATE SPUNDED: 1/7/2013

15. DATE T.D. REACHED: 2/14/2013

16. DATE COMPLETED: 3/7/2013

ABANDONED  READY TO PRODUCE

17. ELEVATIONS (DF, RKB, RT, GL):  
5286' GL

18. TOTAL DEPTH: MD 8,974  
TVD 5,307

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)  
TRIPLE COMBO

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

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

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED
12.25	9.625 J55	36	0	566		G 300		275	
8.75	7 L80	26	0	4,830		515	221		
6.125	4.5 N80	11.6	0	8,944		NONE			

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	4,740							

26. PRODUCING INTERVALS

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)	INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
(A) GREEN RIVER	4,779	8,944			SEE ATTACHED			Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
(B)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
(C)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
(D)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>

27. PERFORATION RECORD

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

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
4,779 - 8,944	50,000 GAL 15% HCL

29. ENCLOSED ATTACHMENTS:

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

30. WELL STATUS:

POW

CONFIDENTIAL

31. INITIAL PRODUCTION

INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED: 3/7/2013		TEST DATE: 3/9/2013		HOURS TESTED: 24		TEST PRODUCTION RATES: →	OIL – BBL: 147	GAS – MCF: 65	WATER – BBL: 16	PROD. METHOD: GPU
CHOKE SIZE:	TBG. PRESS. 50	CSG. PRESS. 50	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL: 147	GAS – MCF: 65	WATER – BBL: 16	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)
				UINTA	0
				GREEN RIVER	1,711
				GARDEN GULCH	3,150
				UTELAND BUTTE	5,337
				C LIME	5,818

35. ADDITIONAL REMARKS (Include plugging procedure)

SEE ATTACHMENT

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 - CONTRACT  
 SIGNATURE *Benna Muth* DATE 3/25/2013

This report must be submitted within 30 days of

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

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

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

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

Phone: 801-538-5340  
 Fax: 801-359-3940

WELL COMPLETION REPORT ATTACHMENT

EM IG-36-9-17

API # 43-047-52400

#4: LOCATION OF WELL

TOP PRODUCING INTERVAL: NENE, 680' FNL, 853' FWL

TOTAL DEPTH: TD 8974', SWSE, 664' FSL, 1343' FEL

#27: PERFORATIONS

SLOTTED AND BLANK LINER FROM 4779' – 8944'. HOLE IS OPEN TO PRODUCTION FROM THE BASE OF 7" CASING (4830') TO TD.

Definitive Surveys

Co: Native Navigation		Units: Feet, °, %/100ft		VS Az: 187.91		Method: Minimum Curvature						
Drillers: Darnell/Bill		Elevation: 5315.10		Map System: St Plane, NAD83								
Well Name: EM 1G36-9-17		Northing: 7169871.16		Latitude: 39.992800								
Location: Uintah County		Easting: 2075027.50		Longitude: -109.948660								
QEP Energy: EM 1G-36-9-17 Svys												
No.	MD	CL	Inc.	Azi.	TVD	VS	+N/S-	+E/W-	BR	WR	DLS	Comments
1	4800.00	0.00	3.70	189.15	4796.34	156.30	-159.00	8.62				Tie Into Gyros
2	4847.00	47.00	4.40	195.80	4843.22	159.60	-162.23	7.89	1.49	14.15	1.79	Native Navigation MWD
3	4879.00	32.00	4.10	193.10	4875.13	161.96	-164.53	7.29	-0.94	-8.44	1.13	Native Navigation MWD
4	4911.00	32.00	3.90	189.10	4907.06	164.19	-166.72	6.86	-0.63	-12.50	1.07	Native Navigation MWD
5	4942.00	31.00	8.70	188.80	4937.86	167.59	-170.08	6.34	15.48	-0.97	15.48	Native Navigation MWD
6	4974.00	32.00	15.20	188.10	4969.15	174.21	-176.63	5.37	20.31	-2.19	20.32	Native Navigation MWD
7	5006.00	32.00	20.60	187.70	4999.59	184.04	-186.37	4.03	16.87	-1.25	16.88	Native Navigation MWD
8	5037.00	31.00	25.10	188.60	5028.15	196.07	-198.28	2.31	14.52	2.90	14.56	Native Navigation MWD
9	5069.00	32.00	28.90	189.00	5056.66	210.60	-212.63	0.09	11.87	1.25	11.89	Native Navigation MWD
10	5100.00	31.00	31.30	189.00	5083.47	226.14	-227.99	-2.34	7.74	0.00	7.74	Native Navigation MWD
11	5132.00	32.00	33.90	188.60	5110.43	243.38	-245.02	-4.98	8.12	-1.25	8.15	Native Navigation MWD
12	5164.00	32.00	37.10	188.70	5136.48	261.96	-263.39	-7.77	10.00	0.31	10.00	Native Navigation MWD
13	5196.00	32.00	39.30	187.50	5161.63	281.74	-282.98	-10.56	6.87	-3.75	7.26	Native Navigation MWD
14	5228.00	32.00	42.30	186.10	5185.85	302.64	-303.74	-13.02	9.37	-4.38	9.80	Native Navigation MWD
15	5259.00	31.00	44.20	184.70	5208.43	323.86	-324.89	-15.02	6.13	-4.52	6.87	Native Navigation MWD
16	5291.00	32.00	43.50	184.20	5231.50	345.99	-346.99	-16.74	-2.19	-1.56	2.44	Native Navigation MWD
17	5323.00	32.00	45.80	183.70	5254.27	368.42	-369.42	-18.29	7.19	-1.56	7.27	Native Navigation MWD
18	5354.00	31.00	47.60	183.50	5275.53	390.92	-391.94	-19.70	5.81	-0.65	5.83	Native Navigation MWD
19	5386.00	32.00	50.20	183.20	5296.56	414.96	-416.01	-21.11	8.12	-0.94	8.16	Native Navigation MWD
20	5418.00	32.00	51.60	184.10	5316.74	439.72	-440.79	-22.69	4.37	2.81	4.89	Native Navigation MWD
21	5449.00	31.00	54.20	185.40	5335.44	464.40	-465.43	-24.74	8.39	4.19	9.03	Native Navigation MWD
22	5481.00	32.00	58.60	186.40	5353.14	491.03	-491.93	-27.49	13.75	3.12	13.99	Native Navigation MWD
23	5513.00	32.00	62.50	188.50	5368.88	518.89	-519.55	-31.11	12.19	6.56	13.46	Native Navigation MWD
24	5544.00	31.00	63.90	188.10	5382.85	546.56	-546.93	-35.11	4.52	-1.29	4.66	Native Navigation MWD
25	5576.00	32.00	68.00	186.30	5395.89	575.77	-575.92	-38.76	12.81	-5.63	13.80	Native Navigation MWD
26	5608.00	32.00	72.20	186.50	5406.78	605.84	-605.81	-42.11	13.12	0.62	13.14	Native Navigation MWD
27	5640.00	32.00	78.00	186.50	5415.01	636.75	-636.52	-45.61	18.12	0.00	18.12	Native Navigation MWD
28	5671.00	31.00	84.30	186.80	5419.77	667.35	-666.93	-49.16	20.32	0.97	20.34	Native Navigation MWD
29	5703.00	32.00	89.10	187.70	5421.61	699.29	-698.62	-53.19	15.00	2.81	15.26	Native Navigation MWD
30	5735.00	32.00	88.60	186.80	5422.26	731.28	-730.35	-57.23	-1.56	-2.81	3.22	Native Navigation MWD
31	5767.00	32.00	88.70	186.40	5423.01	763.26	-762.13	-60.90	0.31	-1.25	1.29	Native Navigation MWD
32	5798.00	31.00	88.50	185.70	5423.77	794.24	-792.95	-64.17	-0.65	-2.26	2.35	Native Navigation MWD
33	5830.00	32.00	88.10	185.20	5424.72	826.19	-824.79	-67.21	-1.25	-1.56	2.00	Native Navigation MWD
34	5862.00	32.00	90.90	185.70	5425.00	858.16	-856.64	-70.25	8.75	1.56	8.89	Native Navigation MWD
35	5872.00	10.00	91.20	185.90	5424.81	868.15	-866.59	-71.26	3.00	2.00	3.60	BHA CHANGE
36	5904.00	32.00	92.30	185.60	5423.84	900.11	-898.41	-74.46	3.44	-0.94	3.56	Native Navigation MWD
37	5936.00	32.00	92.70	185.70	5422.44	932.06	-930.23	-77.61	1.25	0.31	1.29	Native Navigation MWD

Definitive Surveys

38	5967.00	31.00	93.20	185.80	5420.84	962.99	-961.03	-80.71	1.61	0.32	1.64	Native Navigation MWD
39	5999.00	32.00	92.00	185.80	5419.39	994.94	-992.83	-83.94	-3.75	0.00	3.75	Native Navigation MWD
40	6030.00	31.00	92.40	186.50	5418.20	1025.90	-1023.63	-87.26	1.29	2.26	2.60	Native Navigation MWD
41	6062.00	32.00	93.10	186.80	5416.67	1057.86	-1055.38	-90.96	2.19	0.94	2.38	Native Navigation MWD
42	6093.00	31.00	94.20	187.30	5414.69	1088.79	-1086.08	-94.76	3.55	1.61	3.90	Native Navigation MWD
43	6125.00	32.00	92.40	187.40	5412.85	1120.73	-1117.76	-98.85	-5.63	0.31	5.63	Native Navigation MWD
44	6156.00	31.00	90.90	187.30	5411.96	1151.72	-1148.50	-102.81	-4.84	-0.32	4.85	Native Navigation MWD
45	6188.00	32.00	92.20	187.90	5411.09	1183.70	-1180.20	-107.04	4.06	1.87	4.47	Native Navigation MWD
46	6219.00	31.00	92.50	188.00	5409.82	1214.68	-1210.88	-111.32	0.97	0.32	1.02	Native Navigation MWD
47	6251.00	32.00	91.50	188.00	5408.71	1246.66	-1242.55	-115.78	-3.13	0.00	3.13	Native Navigation MWD
48	6282.00	31.00	92.50	188.30	5407.62	1277.64	-1273.22	-120.17	3.23	0.97	3.37	Native Navigation MWD
49	6314.00	32.00	92.20	188.60	5406.31	1309.61	-1304.84	-124.87	-0.94	0.94	1.33	Native Navigation MWD
50	6345.00	31.00	93.10	188.50	5404.88	1340.57	-1335.46	-129.47	2.90	-0.32	2.92	Native Navigation MWD
51	6377.00	32.00	92.60	188.40	5403.29	1372.53	-1367.08	-134.17	-1.56	-0.31	1.59	Native Navigation MWD
52	6408.00	31.00	91.20	188.40	5402.26	1403.51	-1397.73	-138.69	-4.52	0.00	4.52	Native Navigation MWD
53	6440.00	32.00	92.10	187.40	5401.34	1435.50	-1429.41	-143.09	2.81	-3.13	4.20	Native Navigation MWD
54	6471.00	31.00	93.30	187.60	5399.88	1466.46	-1460.11	-147.13	3.87	0.64	3.92	Native Navigation MWD
55	6503.00	32.00	93.30	187.50	5398.04	1498.41	-1491.78	-151.33	0.00	-0.31	0.31	Native Navigation MWD
56	6535.00	32.00	94.00	187.90	5396.00	1530.35	-1523.43	-155.61	2.19	1.25	2.52	Native Navigation MWD
57	6567.00	32.00	92.60	188.50	5394.16	1562.29	-1555.05	-160.16	-4.38	1.87	4.76	Native Navigation MWD
58	6598.00	31.00	92.10	188.60	5392.89	1593.26	-1585.68	-164.77	-1.61	0.32	1.65	Native Navigation MWD
59	6630.00	32.00	92.10	189.40	5391.71	1625.24	-1617.26	-169.77	0.00	2.50	2.50	Native Navigation MWD
60	6661.00	31.00	92.70	189.00	5390.42	1656.20	-1647.83	-174.72	1.94	-1.29	2.33	Native Navigation MWD
61	6693.00	32.00	91.80	188.70	5389.16	1688.17	-1679.43	-179.64	-2.81	-0.94	2.96	Native Navigation MWD
62	6725.00	32.00	92.40	189.10	5387.99	1720.14	-1711.02	-184.59	1.87	1.25	2.25	Native Navigation MWD
63	6756.00	31.00	90.30	190.10	5387.26	1751.12	-1741.58	-189.76	-6.77	3.23	7.50	Native Navigation MWD
64	6788.00	32.00	90.10	189.70	5387.14	1783.10	-1773.10	-195.26	-0.63	-1.25	1.40	Native Navigation MWD
65	6819.00	31.00	90.50	190.20	5386.98	1814.08	-1803.63	-200.62	1.29	1.61	2.07	Native Navigation MWD
66	6851.00	32.00	91.20	189.90	5386.51	1846.05	-1835.14	-206.20	2.19	-0.94	2.38	Native Navigation MWD
67	6882.00	31.00	92.00	190.20	5385.64	1877.02	-1865.65	-211.61	2.58	0.97	2.76	Native Navigation MWD
68	6914.00	32.00	93.10	190.20	5384.22	1908.96	-1897.11	-217.27	3.44	0.00	3.44	Native Navigation MWD
69	6945.00	31.00	92.60	190.20	5382.68	1939.90	-1927.59	-222.75	-1.61	0.00	1.61	Native Navigation MWD
70	6977.00	32.00	90.80	190.80	5381.73	1971.85	-1959.03	-228.58	-5.63	1.87	5.93	Native Navigation MWD
71	7009.00	32.00	92.20	190.80	5380.89	2003.80	-1990.46	-234.57	4.37	0.00	4.37	Native Navigation MWD
72	7040.00	31.00	92.70	190.90	5379.56	2034.73	-2020.87	-240.40	1.61	0.32	1.64	Native Navigation MWD
73	7072.00	32.00	90.40	191.20	5378.70	2066.67	-2052.27	-246.53	-7.19	0.94	7.25	Native Navigation MWD
74	7103.00	31.00	89.80	191.40	5378.64	2097.61	-2082.67	-252.61	-1.94	0.64	2.04	Native Navigation MWD
75	7134.00	31.00	91.10	191.90	5378.40	2128.55	-2113.03	-258.87	4.19	1.61	4.49	Native Navigation MWD
76	7165.00	31.00	91.30	192.20	5377.75	2159.46	-2143.34	-265.34	0.64	0.97	1.16	Native Navigation MWD
77	7197.00	32.00	90.90	192.30	5377.14	2191.36	-2174.60	-272.13	-1.25	0.31	1.29	Native Navigation MWD
78	7228.00	31.00	91.30	191.20	5376.54	2222.28	-2204.95	-278.44	1.29	-3.55	3.78	Native Navigation MWD
79	7260.00	32.00	92.20	190.90	5375.56	2254.22	-2236.34	-284.57	2.81	-0.94	2.96	Native Navigation MWD
80	7291.00	31.00	92.70	190.50	5374.24	2285.16	-2266.77	-290.32	1.61	-1.29	2.06	Native Navigation MWD
81	7323.00	32.00	93.90	190.20	5372.40	2317.07	-2298.20	-296.06	3.75	-0.94	3.86	Native Navigation MWD

Definitive Surveys

82	7355.00	32.00	93.50	189.70	5370.33	2348.99	-2329.65	-301.58	-1.25	-1.56	2.00	Native Navigation MWD
83	7386.00	31.00	92.20	189.10	5368.79	2379.94	-2360.19	-306.63	-4.19	-1.94	4.62	Native Navigation MWD
84	7418.00	32.00	92.90	188.70	5367.37	2411.90	-2391.78	-311.58	2.19	-1.25	2.52	Native Navigation MWD
85	7449.00	31.00	92.20	188.30	5365.99	2442.87	-2422.41	-316.16	-2.26	-1.29	2.60	Native Navigation MWD
86	7480.00	31.00	92.50	188.00	5364.72	2473.84	-2453.07	-320.55	0.97	-0.97	1.37	Native Navigation MWD
87	7512.00	32.00	93.60	188.30	5363.01	2505.79	-2484.70	-325.08	3.44	0.94	3.56	Native Navigation MWD
88	7544.00	32.00	92.10	186.50	5361.42	2537.75	-2516.39	-329.19	-4.69	-5.63	7.32	Native Navigation MWD
89	7575.00	31.00	91.10	184.80	5360.56	2568.71	-2547.23	-332.24	-3.23	-5.48	6.36	Native Navigation MWD
90	7607.00	32.00	91.70	186.50	5359.78	2600.68	-2579.06	-335.39	1.87	5.31	5.63	Native Navigation MWD
91	7639.00	32.00	93.80	187.20	5358.24	2632.63	-2610.79	-339.20	6.56	2.19	6.92	Native Navigation MWD
92	7670.00	31.00	93.80	187.10	5356.19	2663.56	-2641.48	-343.05	0.00	-0.32	0.32	Native Navigation MWD
93	7702.00	32.00	94.70	187.10	5353.81	2695.47	-2673.15	-347.00	2.81	0.00	2.81	Native Navigation MWD
94	7733.00	31.00	93.00	187.00	5351.73	2726.40	-2703.85	-350.80	-5.48	-0.32	5.49	Native Navigation MWD
95	7765.00	32.00	91.30	186.70	5350.53	2758.37	-2735.59	-354.61	-5.31	-0.94	5.39	Native Navigation MWD
96	7797.00	32.00	90.30	186.50	5350.09	2790.36	-2767.38	-358.29	-3.13	-0.63	3.19	Native Navigation MWD
97	7828.00	31.00	90.90	186.90	5349.76	2821.35	-2798.17	-361.90	1.94	1.29	2.33	Native Navigation MWD
98	7860.00	32.00	93.70	187.60	5348.48	2853.32	-2829.88	-365.94	8.75	2.19	9.02	Native Navigation MWD
99	7892.00	32.00	94.20	188.00	5346.27	2885.24	-2861.51	-370.27	1.56	1.25	2.00	Native Navigation MWD
100	7923.00	31.00	91.80	188.10	5344.65	2916.19	-2892.16	-374.61	-7.74	0.32	7.75	Native Navigation MWD
101	7955.00	32.00	89.80	186.30	5344.20	2948.19	-2923.90	-378.61	-6.25	-5.63	8.41	Native Navigation MWD
102	7987.00	32.00	91.10	186.30	5343.95	2980.17	-2955.71	-382.13	4.06	0.00	4.06	Native Navigation MWD
103	8019.00	32.00	92.90	188.00	5342.84	3012.15	-2987.44	-386.11	5.62	5.31	7.73	Native Navigation MWD
104	8050.00	31.00	93.00	188.30	5341.24	3043.10	-3018.08	-390.50	0.32	0.97	1.02	Native Navigation MWD
105	8082.00	32.00	92.40	187.30	5339.73	3075.07	-3049.75	-394.83	-1.88	-3.13	3.64	Native Navigation MWD
106	8113.00	31.00	92.50	187.90	5338.41	3106.04	-3080.45	-398.93	0.32	1.94	1.96	Native Navigation MWD
107	8145.00	32.00	92.90	187.70	5336.90	3138.00	-3112.12	-403.27	1.25	-0.63	1.40	Native Navigation MWD
108	8177.00	32.00	91.10	186.80	5335.78	3169.98	-3143.84	-407.30	-5.63	-2.81	6.29	Native Navigation MWD
109	8208.00	31.00	90.20	186.70	5335.43	3200.97	-3174.62	-410.95	-2.90	-0.32	2.92	Native Navigation MWD
110	8240.00	32.00	91.60	186.80	5334.93	3232.96	-3206.40	-414.71	4.37	0.31	4.39	Native Navigation MWD
111	8271.00	31.00	92.00	186.90	5333.95	3263.94	-3237.16	-418.40	1.29	0.32	1.33	Native Navigation MWD
112	8303.00	32.00	92.50	186.80	5332.70	3295.91	-3268.91	-422.22	1.56	-0.31	1.59	Native Navigation MWD
113	8334.00	31.00	92.90	186.90	5331.24	3326.87	-3299.65	-425.91	1.29	0.32	1.33	Native Navigation MWD
114	8366.00	32.00	94.10	187.40	5329.28	3358.81	-3331.34	-429.88	3.75	1.56	4.06	Native Navigation MWD
115	8398.00	32.00	93.20	186.20	5327.25	3390.74	-3363.05	-433.67	-2.81	-3.75	4.68	Native Navigation MWD
116	8429.00	31.00	92.30	186.20	5325.76	3421.69	-3393.84	-437.01	-2.90	0.00	2.90	Native Navigation MWD
117	8461.00	32.00	92.50	186.00	5324.42	3453.64	-3425.63	-440.41	0.62	-0.63	0.88	Native Navigation MWD
118	8492.00	31.00	91.40	185.10	5323.36	3484.60	-3456.46	-443.40	-3.55	-2.90	4.58	Native Navigation MWD
119	8524.00	32.00	92.10	185.10	5322.39	3516.54	-3488.32	-446.25	2.19	0.00	2.19	Native Navigation MWD
120	8556.00	32.00	92.20	185.30	5321.19	3548.48	-3520.17	-449.15	0.31	0.62	0.70	Native Navigation MWD
121	8587.00	31.00	92.00	185.40	5320.05	3579.43	-3551.01	-452.03	-0.65	0.32	0.72	Native Navigation MWD
122	8619.00	32.00	91.80	184.70	5318.99	3611.37	-3582.87	-454.85	-0.63	-2.19	2.27	Native Navigation MWD
123	8651.00	32.00	92.20	184.90	5317.87	3643.31	-3614.74	-457.53	1.25	0.62	1.40	Native Navigation MWD
124	8683.00	32.00	91.80	184.50	5316.76	3675.24	-3646.61	-460.15	-1.25	-1.25	1.77	Native Navigation MWD
125	8714.00	31.00	91.60	185.00	5315.84	3706.18	-3677.49	-462.71	-0.65	1.61	1.74	Native Navigation MWD





QEP Energy Company

## Daily Activity and Cost Summary

**Well Name: EM 1G-36-9-17**

API 43-047-52400		Surface Legal Location SEC 36-T9S-R17E		Field Name EIGHT MILE FLAT		State UTAH		Well Configuration Type Horizontal	
Ground Elevation (ft) 5,285.1		Casing Flange Elevation (ft) 5,285.10		Current KB to GL (ft) 30.00		KB to CF (ft) 30.00		Spud Date 1/7/2013 09:00	
Final Rig Release 2/17/2013 06:00		Primary Job Type DRILLING		Secondary Job Type DEVELOPMENT		Objective			
Job Category Drilling				Start Date 1/7/2013		Job End Date 2/17/2013			

Purpose

Summary

Contractor Pete Martin Drilling		RIG PETE MARTIN 1	Rig Type AUGER RIG
Contractor PRO-PETRO		RIG 10	Rig Type AIR RIG
Contractor SST Energy		RIG SST 88	Rig Type ROTARY RIG

DOL	Start Date	Summary
1.0	1/7/2013	MIRU, DIG AND SET 40' OF 16" CONDUCTOR. RDMO
2.0	1/9/2013	DRILL AND SET 536 FT OF 9 5/8 CASING
3.0	1/24/2013	HAUL 15 LOADS OF RIG TO NEW LOCATION, CLEANED ON SUB AND DERRICK MOST OF THE DAY ON OLD LOCATION
4.0	1/25/2013	LOAD OUT REST OF RIG ON OLD LOCATION, START SETTING IN BACK YARD AND WORK ON MUD LINES IN PUMP HOUSE.
5.0	1/26/2013	HAUL SOME OF RIG IN AND, SET SUBS AND RIG UP SUBS.
6.0	1/27/2013	FINISH HAULING RIG IN, MOVE IN AND SET UP HOUSES. PUT DERIC TOGETHER AND SET ON FLOOR, BRIDLE UP.
7.0	1/28/2013	RIG UP-WORKON GENERAL RIG UP, FIRE UP MOTORS AND WORK ON STEM SYSTEM. STRIN UP AND EADY DERRICK TO RAISE THIS MORNING.
8.0	1/29/2013	RIG UP- RIASE DERRICK, UNBRIDLE AND PICK UP TOP DRIVE. WORK ON GAS BUSTER PLUMBING.PUT WIND WALLS ON UP AND RIG UP FLOOR. RIG IS 90% RIGGED UP
9.0	1/30/2013	FINISH RIGGING UP TOP DRIVE, STACK BOP AND WORK ON CHANGING FLOW LIE. FINISH PLUMBING GAS BUSTER.
10.0	1/31/2013	RIG UP- FAB FLOW LINE AND CHOKE LINE PIECES. WORK ON GENERAL RIG UP.
11.0	2/1/2013	TEST BOP'S TEST CASING TO 1500 PSI SET WEAR BUSHING PICK UP DIRECTIONAL TOOLS AND SCRIB MWD WORK ON MUD PUMPS (LEAKS) DRILL CEMENT TAG @ 475 FEET & FLOAT EQUIPMENT CIRC FOR FIT TEST PREFORM FIT TEST HELD 20 PSI FOR A TEST OF 8.9 PPG EMW DRILL FROM 575 TO 703 FEET RIG REPAIR (TOP DRIVE HYDROLIC LINE) DIRECTIONAL DRILL FROM 703 FT TO 929 FEET
12.0	2/2/2013	DIRECTIONAL DRILL FROM 929 TO 3204 IN 21 HR'S// FOR 108.3 FPR INSTALL ROT HEAD & RIG SERVICE CONNECTIONS & SURVEYS
13.0	2/3/2013	DIRECTIONAL DRILL FROM 3204 TO 4661 =1457 FT =67.76 FPR PUMP 339 GPM 150 RPM RIG SERVICE CONNECTIONS & SURVEYS
14.0	2/4/2013	DRILL FROM 4661 TO 4840 FEET =179 FT =71.6 FPR PUMP 339 GPM @ 150 RPM CIRC FOR SHORT TRIP, PULL 10 STANDS ,TIH CIRC FOR LOGS, POOH FOR LOGS, RIG UP & LOG RIG DOWN LOGGING TRUCK TIH & CIRC FOR CASING LAY DOWN DRILL PIPE
15.0	2/5/2013	LAY DOWN 4.5" D.P. RIG UP & RUN 7" CASING WASH 40 FT TO BOTTOM & LAND CASING @ 4830 FT. CIRC CASING CEMENT CASING, WASH OUT BOP'S LAY DOWN LANDING JT. SET PACK OFF & TEST PIPE RAMS TO 3.5" DP RIG UP AND RUN GYRO SURVEY'S. LAY OUT AND STRAP 3.5" BHA & PICK UP AND RUN IN THE HOLE.
16.0	2/6/2013	P/U 3.5" DP. SERVICE RIG.CIRCULATE RIG DOWN L/D TRUCK.DRILL SHOE TRACK TO 4850. FIT. DIRECTIONAL DRILL T/ 5290
17.0	2/7/2013	DIRECTIONAL DRILL F/ 5290 T/ 5619. RIG SERVICE. WIPER TRIP TO 5000. DIRECTIONAL DRILL F/ 5619 T/ 5880.
18.0	2/8/2013	CIRCULATE SAMPLES. DIRECTIONAL DRILL T/ 5905. TRIP OUT. CHANGE BHA. TRIP IN. DIRECTIONAL DRILL F/ 5880 T/ 6008. WASHED TOOL JT. DIRECTIONAL DRILL F/ 6008 T/ 6035.
19.0	2/9/2013	DIRECTIONAL DRILL F/ 6035 T/ 6483. SERVICE RIG. SHORT TRIP TO 5915. DIRECTIONAL DRILL F/ 6483 T/ 6736.
20.0	2/10/2013	DIRECTIONAL DRILL FROM 6736 TO 6956,TRIP TO SHUFFLE PUSH PIPE, DIRECTIONAL DRILL FROM 6956 TO 7175.
21.0	2/11/2013	DIRECTIONAL DRILL FROM 7175-7523, SHORT TRIP 7 STANDS. DIRECTIONAL DRILL F/ 7523 T/ 7920.
22.0	2/12/2013	DIRECTIONAL DRILL F/ 7920 T/ 8093. TRIP OUT. CHANGE BIT & MTR. TRIP IN. WASH TIGHT SPOTS @ 5950, 6000 & 7750. WASH 300 FT TO BTM. DIRECTIONAL DRILL F/ 8093 T/ 8120.
23.0	2/13/2013	DIRECTIONAL DRILL F/ 8120 T/ 8562. SERVICE RIG. SHORT TRIP 6 STDS. DIRECTIONAL DRILL F/ 8562 T/ 8775.



QEP Energy Company

### Daily Activity and Cost Summary

Well Name: EM 1G-36-9-17

API 43-047-52400	Surface Legal Location SEC 36-T9S-R17E	Field Name EIGHT MILE FLAT	State UTAH	Well Configuration Type Horizontal
Ground Elevation (ft) 5,285.1	Casing Flange Elevation (ft) 5,285.10	Current KB to GL (ft) 30.00	KB to CF (ft) 30.00	Spud Date 1/7/2013 09:00
				Final Rig Release 2/17/2013 06:00

DOL	Start Date	Summary
24.0	2/14/2013	DIRECTIONAL DRILL F/ 8775 T/ 8974 TD. CIRCULATE. SHORT TRIP TO SHOE. CIRCULATE. TRIP OUT OF HOLE.
25.0	2/15/2013	L/D DIRECTIONAL TOOLS. PJSM. RIG UP & RUN LINER. P/U DC'S. TRIP IN. RELEASE LINER. PJSM. L/D DRILL STRING. TRIP PIPE IN OUT OF DERRICK.
26.0	2/16/2013	LAY DOWN DRILL PIPE, SET RETRIEVABLE BRIDGE PLUG, RIG DOWN AND PREPARE FOR MOVE

<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>1. TYPE OF WELL</b> Oil Well	<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> ML51206
<b>2. NAME OF OPERATOR:</b> QEP ENERGY COMPANY	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>3. ADDRESS OF OPERATOR:</b> 11002 East 17500 South , Vernal, Ut, 84078	<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>PHONE NUMBER:</b> 303 308-3068 Ext	<b>8. WELL NAME and NUMBER:</b> EM 1G-36-9-17
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0680 FNL 0853 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NENE Section: 36 Township: 09.0S Range: 17.0E Meridian: S	<b>9. API NUMBER:</b> 43047524000000
	<b>9. FIELD and POOL or WILDCAT:</b> EIGHT MILE FLAT
	<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: 4/18/2013	<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 checked="" 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"/> 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 requests authorization to flare gas beyond the 30 day limit established in R649-3-20. The well is located approximately 5 miles from the nearest gas gathering system, a Monarch Natural Gas, LLC pipeline. The initial production for the well was approximately 147 BBLS of oil, 16 BBLS of water, and 65 mcf of gas per day. The well is currently making approximately 12 BBLS of oil, 0 BBLS of water, and 1 mcf of gas (metered) per day.

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

**Date:** May 06, 2013

**By:** *Derek Duff*

<b>NAME (PLEASE PRINT)</b> Jan Nelson	<b>PHONE NUMBER</b> 435 781-4331	<b>TITLE</b> Permit Agent
<b>SIGNATURE</b> N/A	<b>DATE</b> 4/18/2013	



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

- State of Utah
- Department of Natural Resources

**Electronic Permitting System - Sundry Notices**

**Sundry Conditions of Approval Well Number 43047524000000**

**In accordance with rule R649-3-20-1.1, up to 1800 MCF of oil well gas may be vented or flared from an individual well on a monthly basis at any time without approval. If the amount flared is going to exceed this amount, a request should be submitted to the Division per rule R649-3-20 or to the Board if beyond what the rule allows for administrative approval.**