STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES

FORM 3

DIVISION OF OIL, GAS, AND MINING

APPLICATION FOR PERMIT TO DRILL

5. MINERAL LEASE NO: **ML-49278**

6. SURFACE: **TRIBAL**

1A. TYPE OF WORK: DRILL ☑ ☐ REENTER ☐ DEEPEN

7. IF INDIAN, ALLOTTEE OR TRIBE NAME: **UTE TRIBE**

B. TYPE OF WELL ☐ OIL ☑ GAS OTHER _____ ☐ SINGLE ZONE ☑ MULTIPLE ZONE

8. UNIT or CA AGREEMENT NAME: **N/A**

2. NAME OF OPERATOR: **QUESTAR EXPLORATION & PRODUCTION, COMPANY**

9. WELL NAME and NUMBER: **FR 6P-16-14-19**

3. ADDRESS OF OPERATOR: **11002 E. 17500 S.** CITY **VERNAL** STATE **UT** ZIP **84078**

PHONE NUMBER: **(435) 781-4331**

10. FIELD AND POOL, OR WILDCAT: **WILDCAT**

4. LOCATION OF WELL (FOOTAGES)
AT SURFACE: **1986' FNL 1988' FWL** 603317X 39.601089
AT PROPOSED PRODUCING ZONE: 4383964Y -109.796648

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: **SENW 16 14S 19E**

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: **41.2 +/- MILES SOUTH OF OURAY, UTAH**

12. COUNTY: **UINTAH**

13. STATE: **UTAH**

15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE(FEET): **1986' + / --**

16. NUMBER OF ACRES IN LEASE: **640.0**

17. NUMBER OF ACRES ASSIGNED TO THIS WELL: **40**

18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET)

19. PROPOSED DEPTH: **13,550'**

20. BOND DESCRIPTION: **965003033**

21. ELEVATIONS (SHOW WHETHER DF, RT, GR,ETC.): **7244.6' GR**

22. APPROXIMATE DATE WORK WILL START: **ASAP**

23. ESTIMATED DURATION: **75 DAYS**

24 **PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT	SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT
	SEE ATTACHED DRILLING PROGRAM		SEE ATTACHED DRILLING PROGRAM

25 **ATTACHMENTS**

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

☑ WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER

☑ COMPLETE DRILLING PLAN

☑ EVIDNECE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER

☐ FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OW

NAME (PLEASE PRINT) Jan Nelson TITLE Regulatory Affairs

SIGNATURE Jan Nelson DATE 9/2/08

(This space for State use only)

API NUMBER ASSIGNED: 43-047-40350 APPROVAL: _____

Approved by the Utah Division of Oil, Gas and Mining

RECEIVED

SEP 04 2008

DIV. OF OIL, GAS & MINING

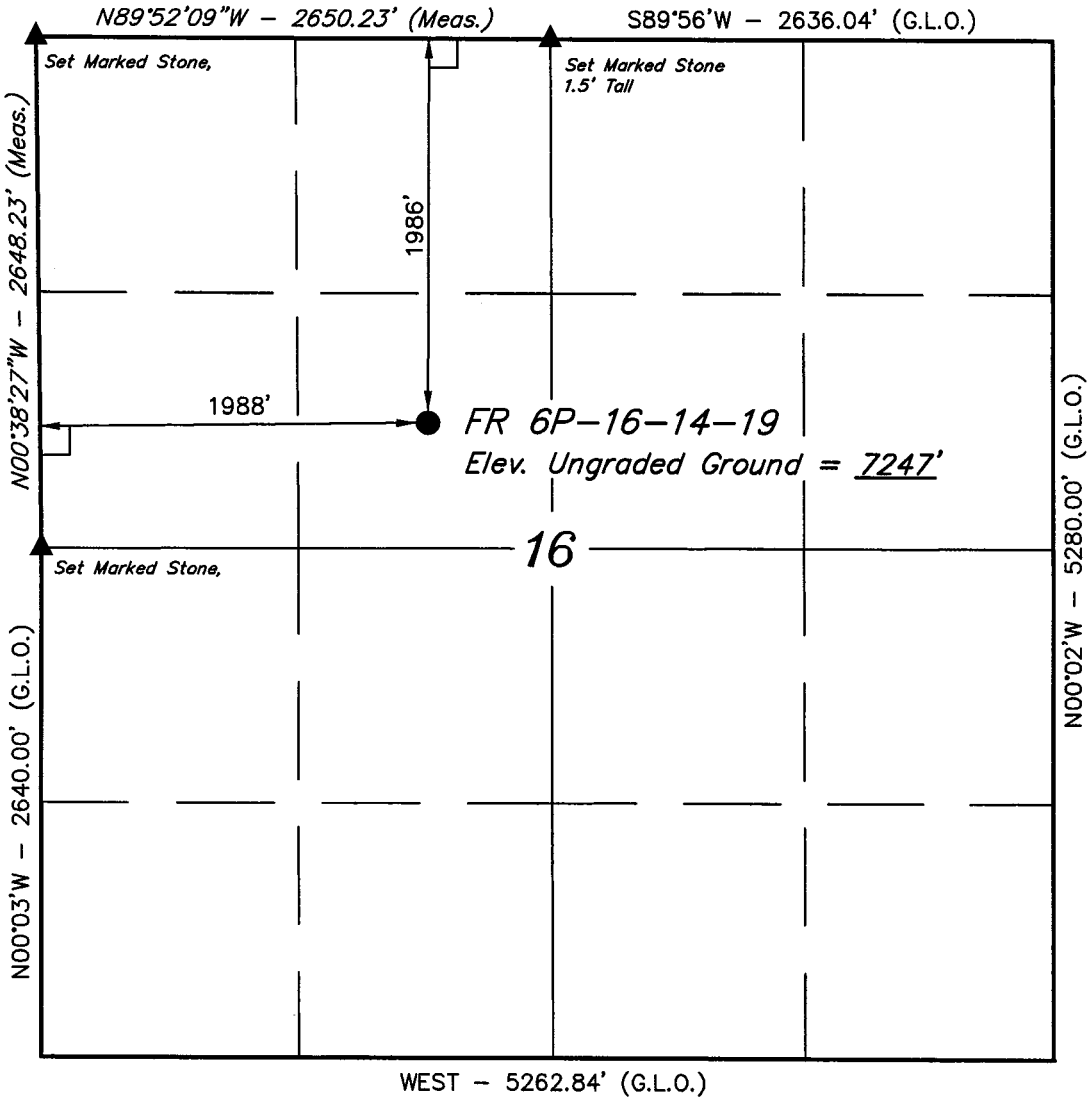
CONFIDENTIAL

Federal Approval of this Action is Necessary

Date: 10-13-08

By: _____

T14S, R19E, S.L.B.&M.



QUESTAR EXLR. & PROD.

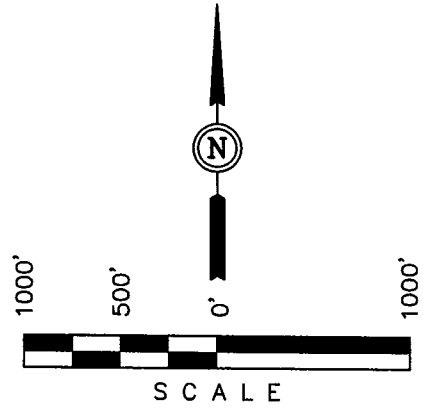
Well location, FR #6P-16-14-19, located as shown in the SE 1/4 NW 1/4 of Section 16, T14S, R19E, S.L.B.&M., Uintah County, Utah.

BASIS OF ELEVATION

BENCH MARK (59 WF) LOCATED ION THE NW 1/4 OF SECTION 10, T15S, R20E, S.L.B.&M., TAKEN FROM THE FLAT ROCK MESA QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 7449 FEET.

BASIS OF BEARINGS

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



CERTIFICATE

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

REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

REGISTERED LAND SURVEYOR No. 161319 ROBERT L. KAY STATE OF UTAH

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

SCALE 1" = 1000'	DATE SURVEYED: 08-18-08	DATE DRAWN: 08-21-08
PARTY J.W. B.J. D.P.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE QUESTAR EXLR. & PROD.	

LEGEND:

└ = 90° SYMBOL

● = PROPOSED WELL HEAD.

▲ = SECTION CORNERS LOCATED.

(NAD 83)
LATITUDE = 39°36'03.14" (39.600872)
LONGITUDE = 109°47'49.32" (109.797033)
(NAD 27)
LATITUDE = 39°36'03.27" (39.600908)
LONGITUDE = 109°47'46.82" (109.796339)

Additional Operator Remarks

Questar Exploration & Production Company proposes to drill a well to 13,500' to test the Wingate. If productive, casing will be run and the well completed. If dry, the well will be plugged and abandoned as per BLM and State of Utah requirements"

Please see Onshore Oil & Gas Order NO. 1

Please be advised that Questar Exploration & Production Company agrees to be responsible under the terms and conditions of the lease for the operations conducted upon the lease lands.

Bond coverage for this well is provided by Bond No.965003033. The principal is Questar Exploration & Production Company via surety as consent as provided for the 43 CFR 3104.2.

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 and Gas No. 1, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.

1. Formation Tops

The estimated tops of important geologic markers are as follows:

Formation	TVD	MD	Prod. Phase Anticipated
Green River	Surf	Surf	
Wasatch	3,300	3,330	
Mesa Verde	5,250	5,250	Gas
Castlegate	7,450	7,450	
Mancos	8,210	8,210	
Dakota Silt	11,640	11,640	
Dakota	11,750	11,750	Gas
Cedar Mountain	11,830	11,830	
Morrison	12,060	12,060	
Curtis	12,590	12,590	
Entrada	12,770	12,770	Gas
Carmel	13,030	13,030	
Wingate	13,340	13,340	Gas
TD	13,550	13,550	

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 are as follows:

Substance	Formation	TVD Depth	MD Depth
Gas	Mesaverde	5,250'	5,250'
Gas	Dakota	11,750'	11,750'
Gas	Entrada	12,770'	12,770'
Gas	Wingate	13,340'	13,340'

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

All water shows and water-bearing sands will be reported to the BLM in Vernal, Utah. Copies of State of Utah form OGC-8-X are acceptable. If no flows are detected, samples will be submitted to the BLM along with any water analyses conducted. Fresh water will be obtained from Willow Creek water right #49-2183 / Permit# T75500.

All waste water resulting from drilling operations will be disposed of at RNI disposal pit which is located in NWNE Section 5, T9S, R22E.

3. Operator's Specification for Pressure Control Equipment:

A. 5,000 psi W.P. Double Gate BOP or Single Gate BOP (schematic attached)

B. Functional test daily

C. All casing strings shall be pressure tested (0.2 psi/foot or 1500 psi, or 70 % of burst whichever is greater) prior to drilling the plug after cementing; test pressure shall not exceed the internal yield pressure of the casing.

D. Ram type preventers and associated equipment shall be tested to approved stack working pressure if isolated by test plug or to 50 percent of internal yield pressure of casing whichever is less. BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc…, for a 5M system and individual components shall be operable as designed.

4. Casing Program

	Depth	Hole Size	Csg Size	Type	Weight
Surface	500'	14-3/4"	10-3/4"	J-55	40.5lb/ft (new)
Intermediate	4800'	9-7/8"	7-5/8"	P-110	29.7lb/ft (new)
Production	TD	6-1/2"	4-1/2"	P-110	13.5lb/ft (new)

5. Auxiliary Equipment

A. Kelly Cock – yes

B. Float at the bit – no

C. Monitoring equipment on the mud system – visually

D. Full 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.

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.

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

PVT/Flow Show will be used from base of surface casing to TD.

Gas detector will be used from surface casing depth to TD.

6. Testing, logging and coring program

A. Cores – none anticipated

B. DST – none anticipated

C. Mud logging – surface casing to TD.

D. Logging – GR-SP-Induction
Neutron Density

E. Formation and Completion Interval is in the Wingate zone and the final determination of completion method will be made by analysis of logs.

Stimulation will be designed for the particular area of interest as encountered.

7. Cementing Program

See attached Cementing Recommendation.

- Final cement volumes to be calculated from a caliper log with an attempt made to circulate cement to surface on intermediate casing and to 3,000'on production casing.
- A bond log will be run across the zone of interest and across zones as required by the authorized officer to insure protection of natural resources.

8. Anticipated Abnormal Pressures and Temperatures, Other Potential Hazards

No abnormal temperatures or pressures are anticipated. No H_2S has been encountered in or known to exist from previous wells drilled to similar depths in the general area. Maximum anticipated bottom hole pressure equals approximately 5500 psi. Maximum anticipated bottom hole temperature is 220° F.

9. Surface Owner

The well pad and access road are located on lands owned by the Ute Tribe.

QUESTAR EXPLORATION & PRODUCTION, CO.
FR 6P-16-14-19
1986' FNL 1988' FWL
SENW SECTION 16, T14S, R19E, SLB&M
UINTAH COUNTY, UTAH
LEASE # ML-49278

ONSHORE ORDER NO. 1

MULTI – POINT SURFACE USE & OPERATIONS PLAN

1. **Existing Roads:**

The proposed well site is approximately 41.2 miles from Ouray, Utah.

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

2. **Planned Access Roads:**

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

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

Please refer to Topo Map C.

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

Refer to Topo Map D for the location of the proposed pipeline.

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

Fresh water for drilling purposes will be obtained from Willow Creek water right # 49-2183 Permit # T75500.

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

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 with 120 days after drilling is terminated. Immediately upon well completion, any hydrocarbons in the pit shall be removed in accordance with 43 CFR 3162.7-1.

After first production, produced wastewater will be confined to the approved pit or storage tank for a period not to exceed 90 days. During the 90 day period, in accordance with Onshore Order #7, all produced water will be contained in tanks on location and then hauled to Wonsits Valley location in SWNW Sec. 12, T8S, R21E; or Red Wash Disposal Well located in NESW, Sec. 28, T7S,R22E or, Red Wash Central Battery Disposal located in SWSE, Section 27, T7S, R23E. Pit reclamation for lined pit will be ruptured when emptied to allow the remaining liquid to be adequately mixed and to promote additional drying of the pit area.

8. **Ancillary Facilities:**

None anticipated.

9. **Well Site Layout: (See Location Layout Diagram)**

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram to describe rig orientation, parking areas, and access roads.

A Pit liner is required felt if rock encountered.

10. **Plans for Reclamation of the Surface:**

Topsoil will be stripped and salvaged to provide for sufficient quantities to be respread to a depth of at least 4 to 6 inches over the disturbed areas to be reclaimed. Topsoil shall be stock piled separately from subsoil materials. Topsoil salvaged from the reserve pit shall be stockpiled separately near the reserve pit. Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, materials, trash, and debris not required for production. Alternatively, the pit will be pumped dry, the liner folded into the pit, and the pit backfilled. The reserve pit will be reclaimed within 120 days from the date of well completion, weather permitting.

11. **Surface Ownership:**

The well pad and access road are located on lands owned by:

Ute Tribe
P.O. Box 70
Fort Duchesne, UT 84026

12. **Other Information:**

A Class III archaeological survey was conducted by Montgomery Archaeology Consultants. A copy of this report was submitted directly to the appropriate agencies by Montgomery Archaeology Consultants. Cultural resource clearance was recommended for this location.

Lessee's or Operator's Representative:

Jan Nelson
Red Wash Rep.
Qestar Exploration & Production, Co.
11002 East 17500 South
Vernal, Utah 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 & Gas Orders, the approved plan of operations, and any applicable Notice to Lessees.

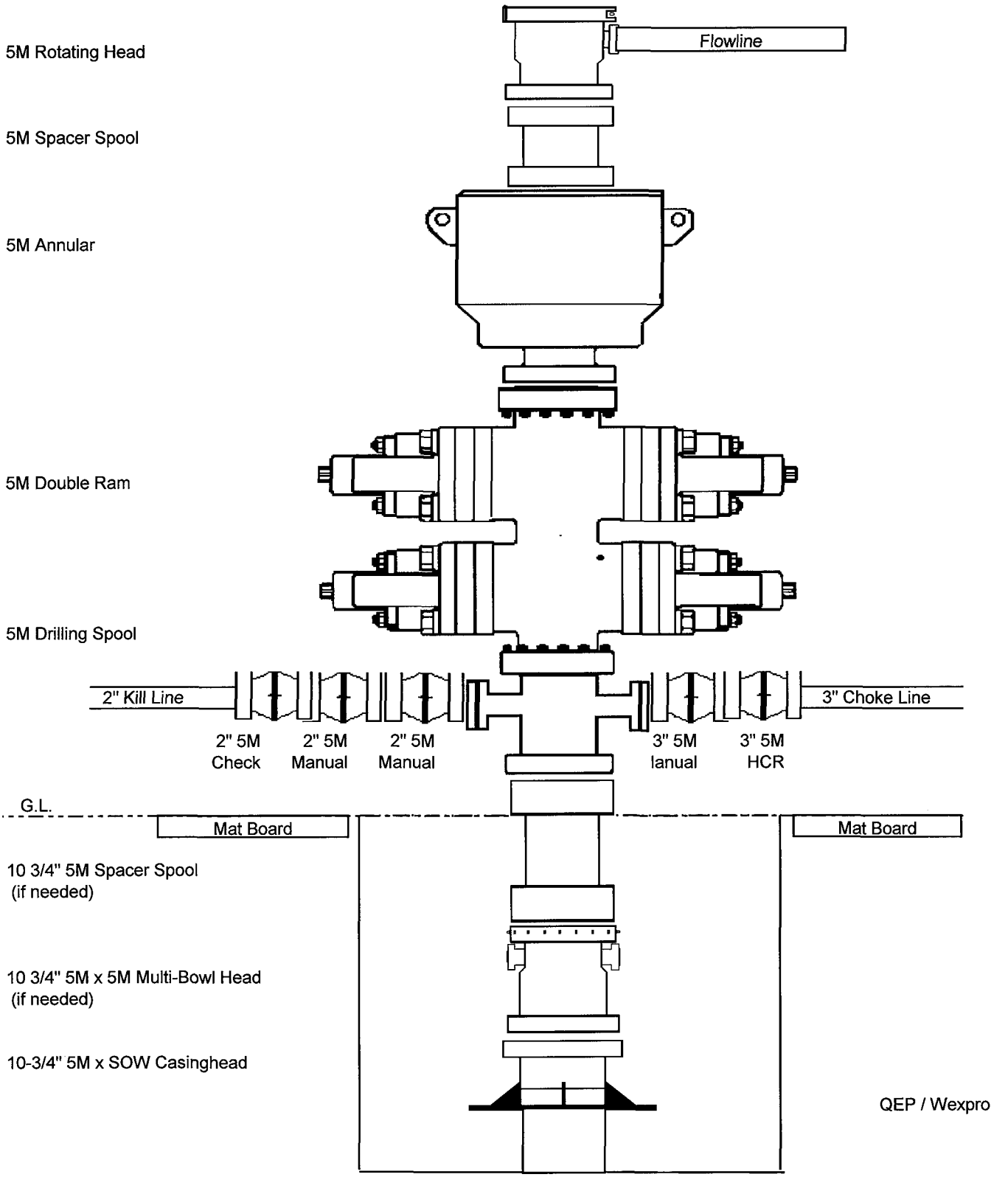
QEP will be fully responsible for the actions of their subcontractors.

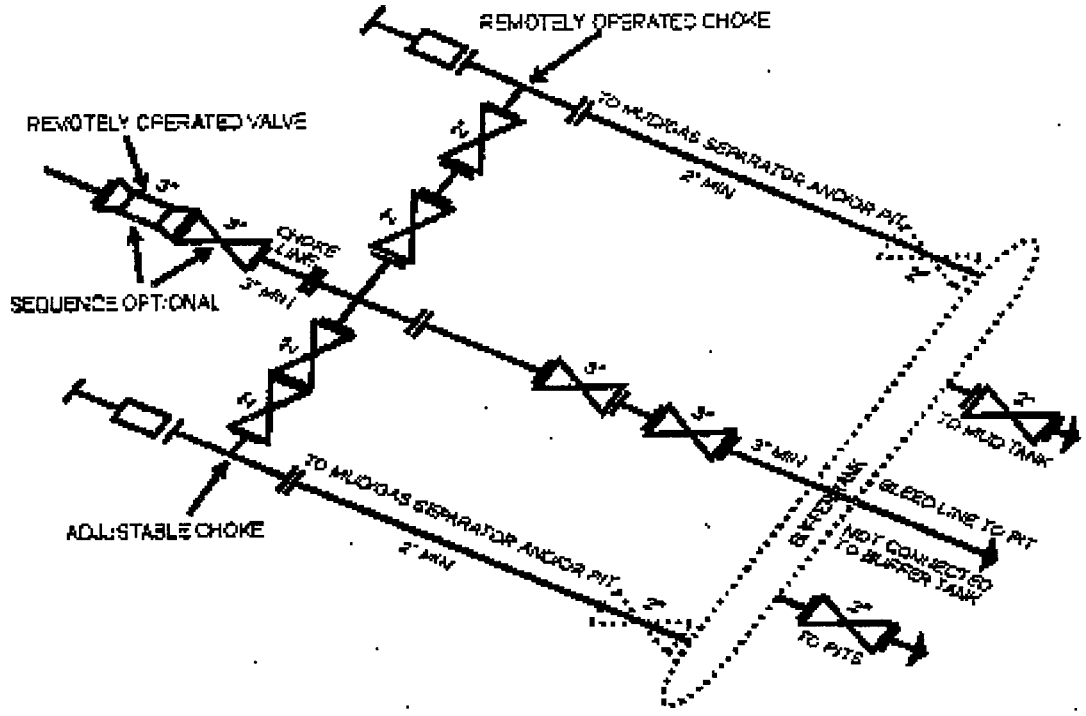
A complete copy of the approved Application for Permit to Drill will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by QEP its' contractors and subcontractors 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
Jan Nelson
Red Wash Representative

02-Sep-08
Date


5M Rotating Head
Flowline
5M Spacer Spool
5M Annular
5M Double Ram
5M Drilling Spool
2" Kill Line
3" Choke Line
2" 5M Check
2" 5M Manual
2" 5M Manual
3" 5M lanual
3" 5M HCR
G.L.
Mat Board
Mat Board
10 3/4" 5M Spacer Spool (if needed)
10 3/4" 5M x 5M Multi-Bowl Head (if needed)
10-3/4" 5M x SOW Casinghead
QEP / Wexpro

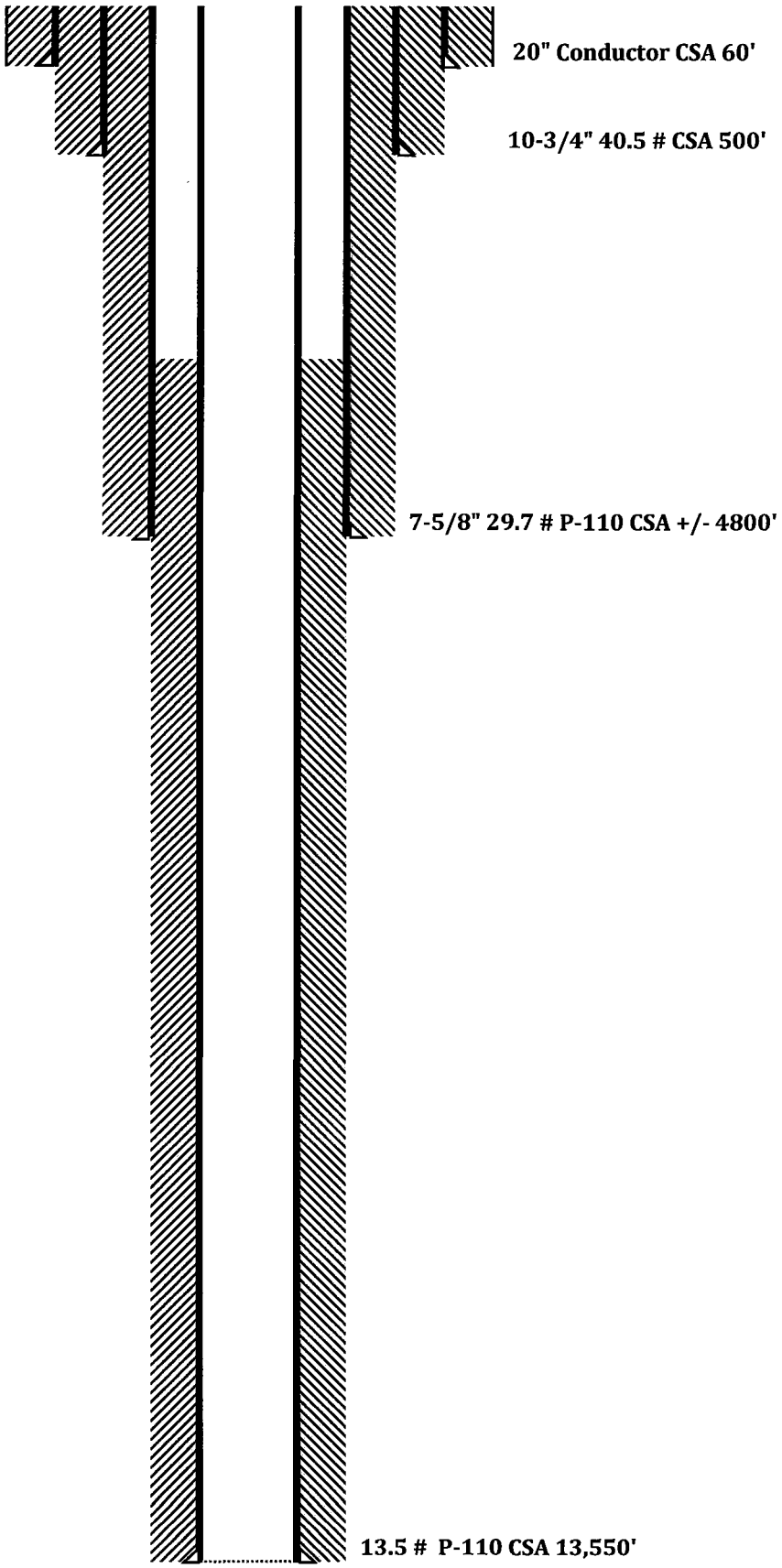


5M CHOKE MANIFOLD EQUIPMENT - CONFIGURATION OF CHOKES MAY VARY

Although not required for any of the choke manifold systems, buffer tanks are sometimes installed downstream of the choke assemblies for the purpose of manifolding the bleed lines together. When buffer tanks are employed, valves shall be installed upstream to isolate a failure or malfunction without interrupting flow control. Though not shown on 2M, 3M, 10M, OR 15M drawings, it would also be applicable to these situations.

[54 FR 39528, Sept. 27, 1989]

Flat Rock 6P-16-14-19



Wasatch	3,300
Mesaverde	5,250
Castlegate	7,450
Mancos	8,210
Dakota Silt	11,640
Dakota	11,750
Cedar Mountain	11,830
Morrison	12,060
Curtis	12,590
Entrada	12,770
Carmel	13,030
Navajo	13,080
Wingate	13,340
T.D.	13,550

Q E P E-bill
1050 17th Street, Ste 500-do Not Ma
Denver, Colorado 80265

FR 6P-16-14-19
Flat Rock Field
Uintah County, Utah
United States of America

Multi-String Cementing Recommendation

Prepared for: Mr. John Owen
August 29, 2008
Version: 1

Submitted by:
Aaron James
Halliburton
1125 17th St Suite 1900
Denver, Colorado 80202
303.899.4717

Job Information

Surface Casing

Well Name: FR	Well #: 6P-16-14-19
14-3/4" Surface Open Hole	0 - 500 ft (MD)
	0 - 500 ft (TVD)
Inner Diameter	14.750 in
Job Excess	100 %
10-3/4" Surface Casing	0 - 500 ft (MD)
	0 - 500 ft (TVD)
Outer Diameter	10.750 in
Inner Diameter	10.050 in
Linear Weight	40.500 lbm/ft
Casing Grade	J-55
Mud Type	Air

Fluid Instructions

Fluid 1: Water Based Spacer

Gel Water

Fluid Density:	8.340 lbm/gal
Fluid Volume:	20 bbl

Fluid 2: Primary Cement

Rockies LT

0.25 lbm/sk Kwik Seal (Lost Circulation Additive)

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

Fluid Weight	13.500 lbm/gal
Slurry Yield:	1.804 ft^3/sk
Total Mixing Fluid:	9.339 Gal/sk
Top of Fluid:	0 ft
Calculated Fill:	500 ft
Volume:	103.206 bbl
Calculated Sacks:	321.209 sks
Proposed Sacks:	325 sks

Fluid 3: Water Spacer

Water Displacement

Fluid Density:	8.340 lbm/gal
Fluid Volume:	44.937 bbl

Fluid 4: Top Out Cement

Premium Plus - Type III

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

2 % Calcium Chloride (Accelerator)

Fluid Weight	14.500 lbm/gal
Slurry Yield:	1.410 ft^3/sk
Total Mixing Fluid:	6.855 Gal/sk
Proposed Sacks:	200 sks

Detailed Pumping Schedule

Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Estimated Avg Rate bbl/min	Downhole Volume
1	Spacer	Gel Water	8.3	5.0	20 bbl
2	Cement	Rockies LT	13.5	5.0	325 sks
3	Spacer	Water Displacement	8.3	5.0	44.937 bbl
4	Cement	Top Out Cement	14.5	1.5	200 sks

Job Information

Intermediate Casing

Well Name: FR	Well #: 6P-16-14-19
10-3/4" Surface Casing	0 - 500 ft (MD)
	0 - 500 ft (TVD)
Outer Diameter	10.750 in
Inner Diameter	10.050 in
Linear Weight	40.500 lbm/ft
Casing Grade	J-55
9-7/8" Intermediate Open Hole	500 - 4800 ft (MD)
Inner Diameter	9.875 in
Job Excess	50 %
7-5/8" Intermediate Casing	0 - 4800 ft (MD)
Outer Diameter	7.625 in
Inner Diameter	6.875 in
Linear Weight	29.700 lbm/ft
Casing Grade	P-110
Mud Type	Aerated
Mud Weight	8.400 lbm/gal
BHCT	95 degF

Fluid Instructions

Fluid 1: Water Spacer
Fresh Water Ahead

Fluid Density:	8.340 lbm/gal
Fluid Volume:	10 bbl

Fluid 2: Reactive Spacer
Super Flush

Fluid Density:	9.200 lbm/gal
Fluid Volume:	20 bbl

50 lbm/bbl Halliburton Super Flush (Flush/spacer Additive)
42 lbm/bbl Fresh Water (Base Fluid)

Fluid 3: Water Spacer
Fresh Water Behind

Fluid Density:	8.340 lbm/gal
Fluid Volume:	10 bbl

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

Fluid Weight	14.300 lbm/gal
Slurry Yield:	1.470 ft^3/sk
Total Mixing Fluid:	6.407 Gal/sk
Top of Fluid:	0 ft
Calculated Fill:	2200 ft
Volume:	118.355 bbl
Calculated Sacks:	263.551 sks
Proposed Sacks:	265 sks

Fluid 5: Foamed Lead Cement
ELASTISEAL SYSTEM
1.5 % FDP-C760-04 (Fdp Additive)

Fluid Weight	14.300 lbm/gal
Slurry Yield:	1.470 ft^3/sk
Total Mixing Fluid:	6.407 Gal/sk
Top of Fluid:	2200 ft
Calculated Fill:	2100 ft
Volume:	120.487 bbl
Calculated Sacks:	345.523 sks
Proposed Sacks:	350 sks

Fluid 6: Tail Cement
ELASTISEAL SYSTEM

Fluid Weight	14.300 lbm/gal
Slurry Yield:	1.469 ft^3/sk
Total Mixing Fluid:	6.399 Gal/sk
Top of Fluid:	4300 ft
Calculated Fill:	500 ft
Volume:	30.616 bbl
Calculated Sacks:	117.015 sks

	Proposed Sacks:	120 sks

Fluid 7: Water Spacer
Displacement

Fluid Density:	8.340 lbm/gal
Fluid Volume:	307.700 bbl

Fluid 8: Top Out Cement
Premium Cement

94 lbm/sk Premium Cement (Cement)
12 % Cal-Seal 60 (Accelerator)
3 % Calcium Chloride (Accelerator)

Fluid Weight	14.600 lbm/gal
Slurry Yield:	1.550 ft^3/sk
Total Mixing Fluid:	7.347 Gal/sk
Proposed Sacks:	200 sks

Detailed Pumping Schedule

Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Estimated Avg Rate bbl/min	Downhole Volume
1	Spacer	Fresh Water Ahead	8.3	5.0	10 bbl
2	Spacer	Super Flush	9.2	5.0	20 bbl
3	Spacer	Fresh Water Behind	8.3	5.0	10 bbl
4	Cement	8.5 ppg Foamed Elastiseal	14.3	5.0	265 sks
5	Cement	11 ppg Foamed Elastiseal	14.3	5.0	350 sks
6	Cement	Unfoamed Elastiseal	14.3	5.0	120 sks
7	Spacer	Displacement	8.3	7.0	307.700 bbl
8	Cement	Cap Cement	14.6	1.5	200 sks

Foam Output Parameter Summary:

Fluid #	Fluid Name	Unfoamed Liquid Volume	Beginning Density lbm/gal	Ending Density lbm/gal	Beginning Rate scf/bbl	Ending Rate scf/bbl
Stage 1						
4	8.5 ppg Foamed Elastiseal	69.00bbl	8.5	8.5	23.3	289.0
5	11 ppg Foamed Elastiseal	90.46bbl	11.0	11.0	125.2	275.8

Foam Design Specifications:

Foam Calculation Method: Constant Density
Backpressure: 75 psig
Bottom Hole Circulating Temp: 95 degF
Mud Outlet Temperature: 80 degF

Calculated Gas = 29089.5 scf
Additional Gas = 40000 scf
Total Gas = 69089.5 scf

Job Information — Production Casing

Well Name: FR	Well #: 6P-16-14-19
10-3/4" Surface Casing	0 - 500 ft (MD)
	0 - 500 ft (TVD)
Outer Diameter	10.750 in
Inner Diameter	10.050 in
Linear Weight	40.500 lbm/ft
Casing Grade	J-55
7-5/8" Intermediate Casing	0 - 4800 ft (MD)
Outer Diameter	7.625 in
Inner Diameter	6.875 in
Linear Weight	29.700 lbm/ft
Casing Grade	P-110
6-1/2" Production Open Hole	4800 - 13550 ft (MD)
Inner Diameter	6.500 in
Job Excess	40 %
4-1/2" Production Casing	0 - 13550 ft (MD)
Outer Diameter	4.500 in
Inner Diameter	3.920 in
Linear Weight	13.500 lbm/ft
Casing Grade	P-110
Mud Type	Water Based Mud
Mud Weight	9.500 lbm/gal
BHCT	180 degF

Fluid Instructions

Fluid 1: Water Spacer
Fresh Water Ahead

Fluid Density:	8.340 lbm/gal
Fluid Volume:	10 bbl

Fluid 2: Reactive Spacer
Super Flush

Fluid Density:	9.200 lbm/gal
Fluid Volume:	20 bbl

Fluid 3: Water Spacer
Fresh Water Behind

Fluid Density:	8.340 lbm/gal
Fluid Volume:	10 bbl

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

Fluid Weight	14.300 lbm/gal
Slurry Yield:	1.470 ft^3/sk
Total Mixing Fluid:	6.407 Gal/sk
Top of Fluid:	3000 ft
Calculated Fill:	10050 ft
Volume:	294.077 bbl
Calculated Sacks:	816.902 sks
Proposed Sacks:	820 sks

Fluid 5: Tail Cement
ELASTISEAL SYSTEM

Fluid Weight	14.300 lbm/gal
Slurry Yield:	1.469 ft^3/sk
Total Mixing Fluid:	6.399 Gal/sk
Top of Fluid:	13050 ft
Calculated Fill:	500 ft
Volume:	15.587 bbl
Calculated Sacks:	59.574 sks
Proposed Sacks:	60 sks

Fluid 6: Water Spacer
Displacement

Fluid Density:	8.340 lbm/gal
Fluid Volume:	201.638 bbl

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

Fluid Weight	14.600 lbm/gal
Slurry Yield:	1.550 ft^3/sk
Total Mixing Fluid:	7.347 Gal/sk
Proposed Sacks:	200 sks

Detailed Pumping Schedule

Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Estimated Avg Rate bbl/min	Downhole Volume
1	Spacer	Fresh Water Ahead	8.3	5.0	10 bbl
2	Spacer	Super Flush	9.2	5.0	20 bbl
3	Spacer	Fresh Water Behind	8.3	5.0	10 bbl
4	Cement	Elastiseal Foamed Lead	14.3	5.0	820 sks
5	Cement	Elastiseal Unfoamed Tail	14.3	5.0	60 sks
6	Spacer	Displacement	8.3	7.0	201.638 bbl
7	Cement	12/3 Thixo	14.6	1.5	200 sks

Foam Output Parameter Summary:

Fluid #	Fluid Name	Unfoamed Liquid Volume	Beginning Density lbm/gal	Ending Density lbm/gal	Beginning Rate scf/bbl	Ending Rate scf/bbl
Stage 1						
4	Elastiseal Foamed Lead	213.88bbl	11.0	11.0	164.9	739.3

Foam Design Specifications:

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

Calculated Gas = 100579.8 scf
Additional Gas = 40000 scf
Total Gas = 140579.8 scf

QUESTAR EXPLR. & PROD.

FR #6P-16-14-19

LOCATED IN UINTAH COUNTY, UTAH
SECTION 16, T14S, R19E, S.L.B.&M.

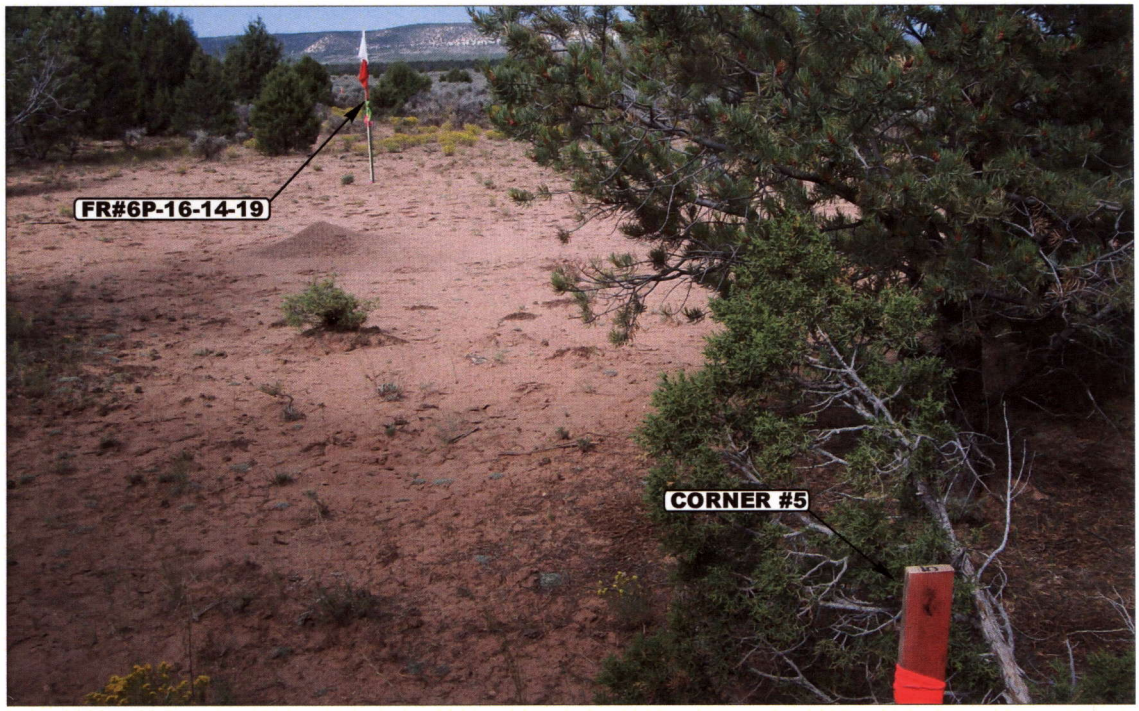


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE **CAMERA ANGLE: SOUTHWESTERLY**

PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS **CAMERA ANGLE: SOUTHEASTERLY**

- Since 1964 -

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

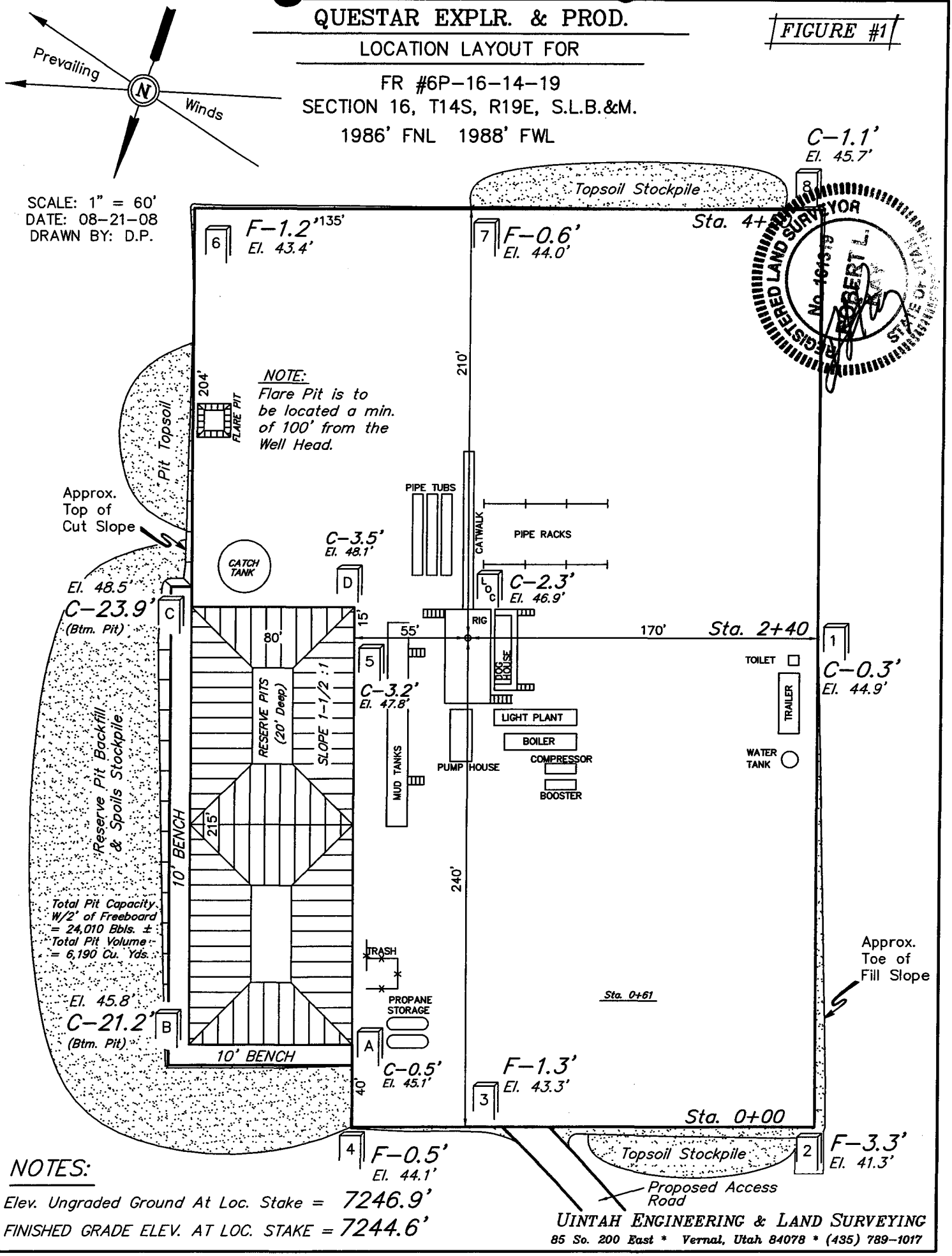
LOCATION PHOTOS	08 MONTH	21 DAY	08 YEAR	PHOTO
TAKEN BY: J.W.	DRAWN BY: J.H.	REVISED: 00-00-00		

QUESTAR EXPLR. & PROD.

LOCATION LAYOUT FOR

FR #6P-16-14-19
SECTION 16, T14S, R19E, S.L.B.&M.
1986' FNL 1988' FWL

FIGURE #1



NOTES:

Elev. Ungraded Ground At Loc. Stake = 7246.9'

FINISHED GRADE ELEV. AT LOC. STAKE = 7244.6'

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

QUESTAR EXPLR. & PROD.

TYPICAL CROSS SECTIONS FOR

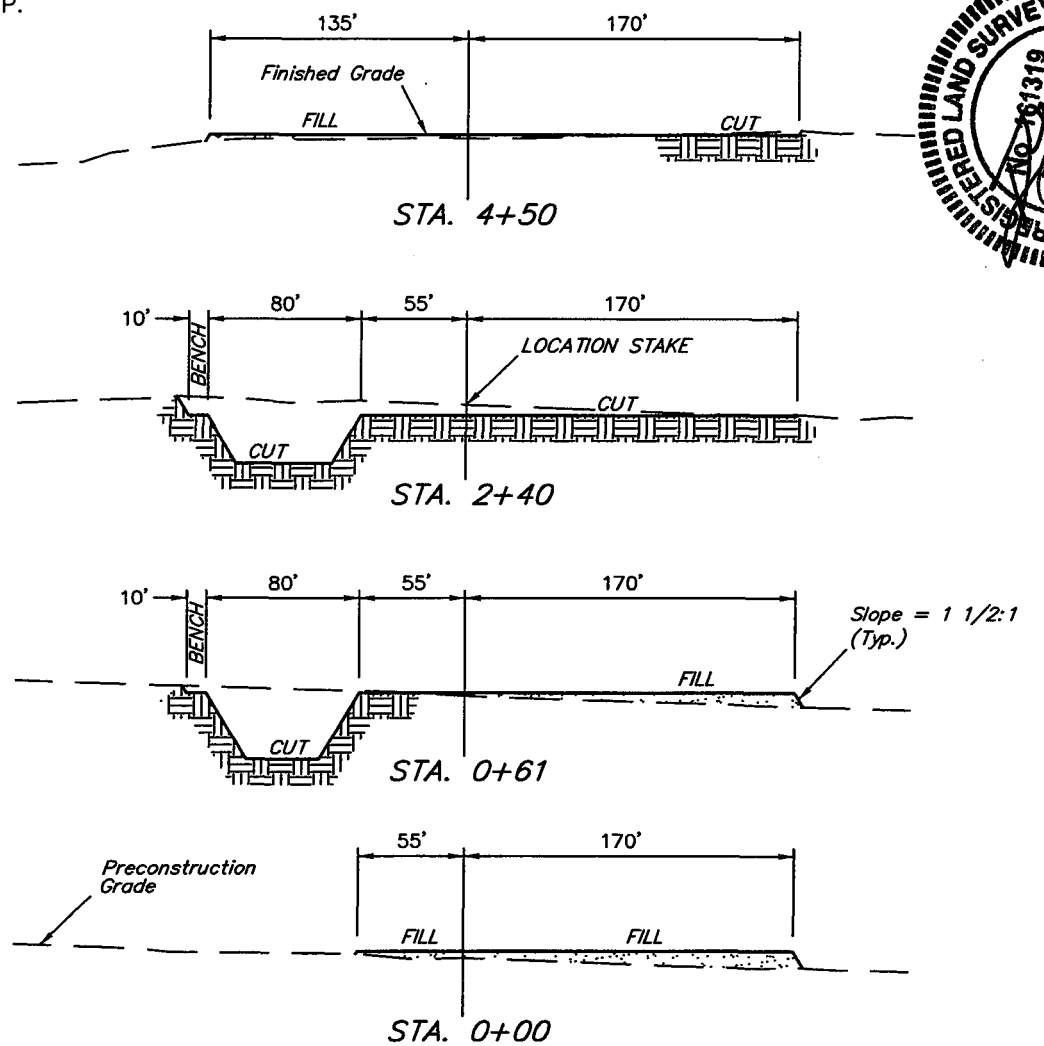
FR #6P-16-14-19
SECTION 16, T14S, R19E, S.L.B.&M.
1986' FNL 1988' FWL

FIGURE #2

1" = 40'
X-Section Scale
1" = 100'

SCALE: 1" = 60'
DATE: 08-21-08
DRAWN BY: D.P.

REGISTERED LAND SURVEYOR
REGISTRATION No. 161319
ROBERT L. KAY
STATE OF UTAH



APPROXIMATE ACREAGES

WELL SITE DISTURBANCE = ± 5.083 ACRES
ACCESS ROAD DISTURBANCE = ± 1.206 ACRES
PIPELINE DISTURBANCE = ± 12.544 ACRES
TOTAL = ± 18.833 ACRES

* NOTE:
FILL QUANTITY INCLUDES 5% FOR COMPACTION

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

APPROXIMATE YARDAGES

CUT
(12") Topsoil Stripping = 5,380 Cu. Yds.
Remaining Location = 7,870 Cu. Yds.

TOTAL CUT = 13,250 CU.YDS.
FILL = 4,770 CU.YDS.

EXCESS MATERIAL = 8,480 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.) = 8,480 Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation) = 0 Cu. Yds.

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

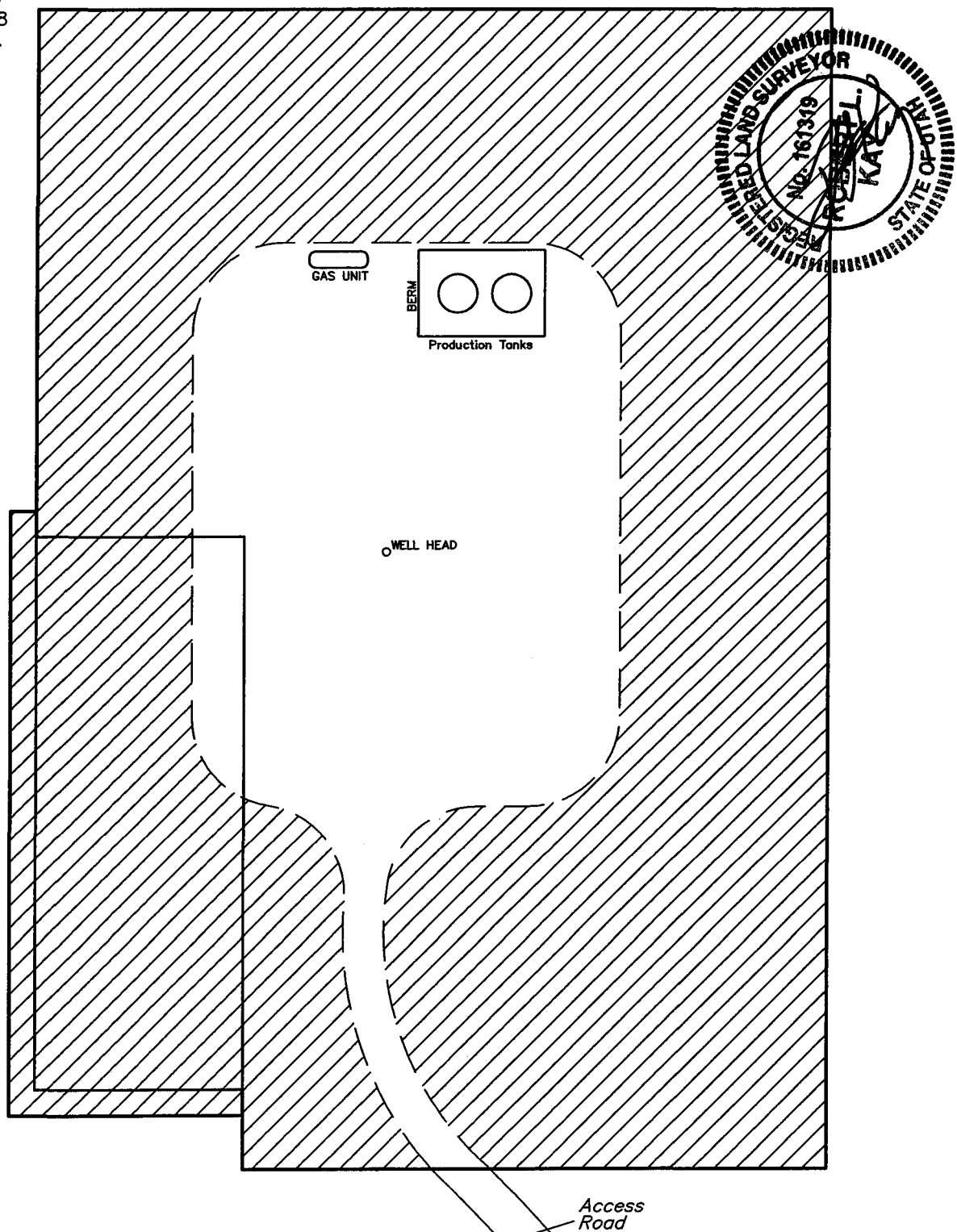
QUESTAR EXPLR. & PROD.

INTERIM RECLAMATION PLAN FOR

FR #6P-16-14-19
SECTION 16, T14S, R19E, S.L.B.&M.
1986' FNL 1988' FWL

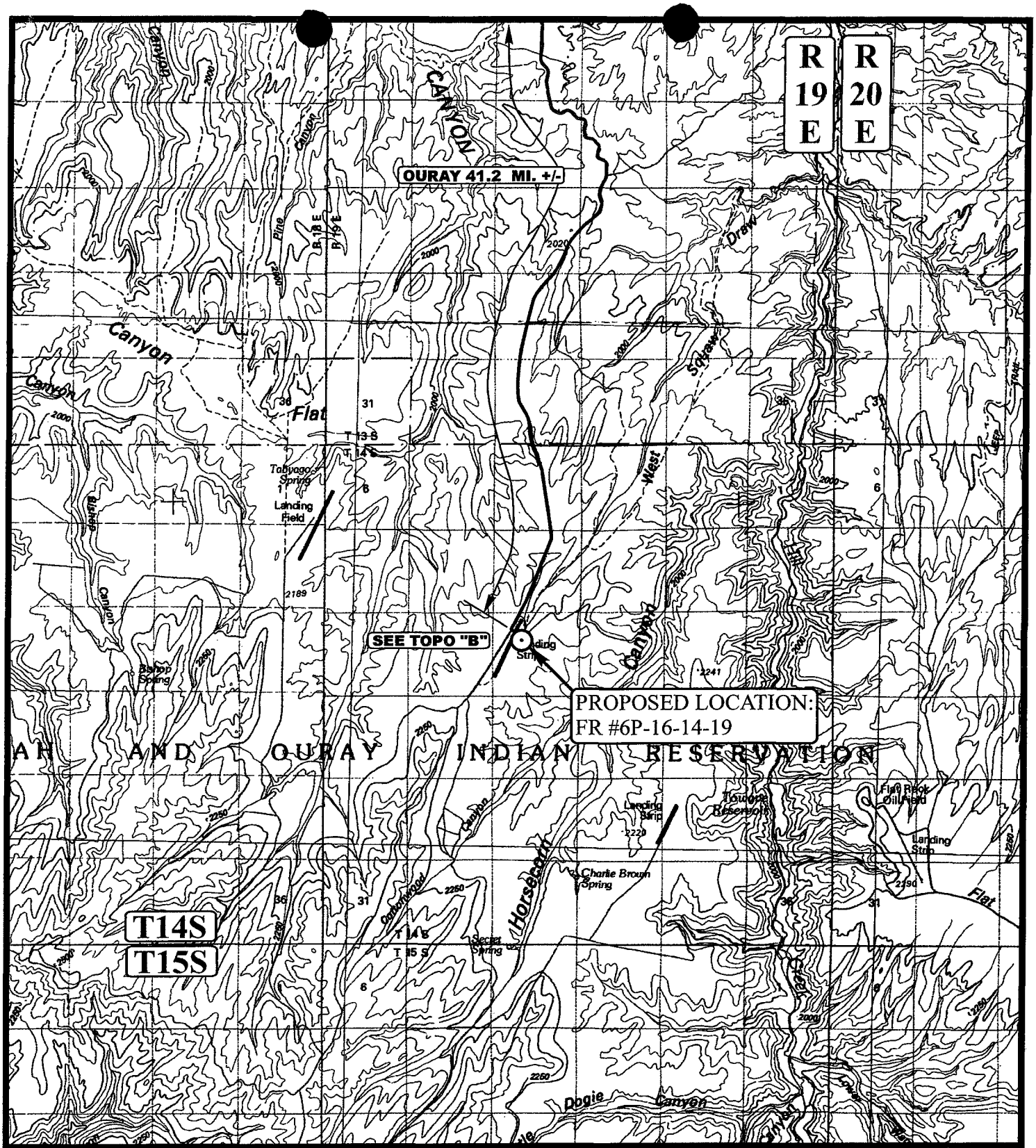
FIGURE #3

SCALE: 1" = 60'
DATE: 08-21-08
DRAWN BY: D.P.



INTERIM RECLAMATION

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



LEGEND:

⊙ PROPOSED LOCATION

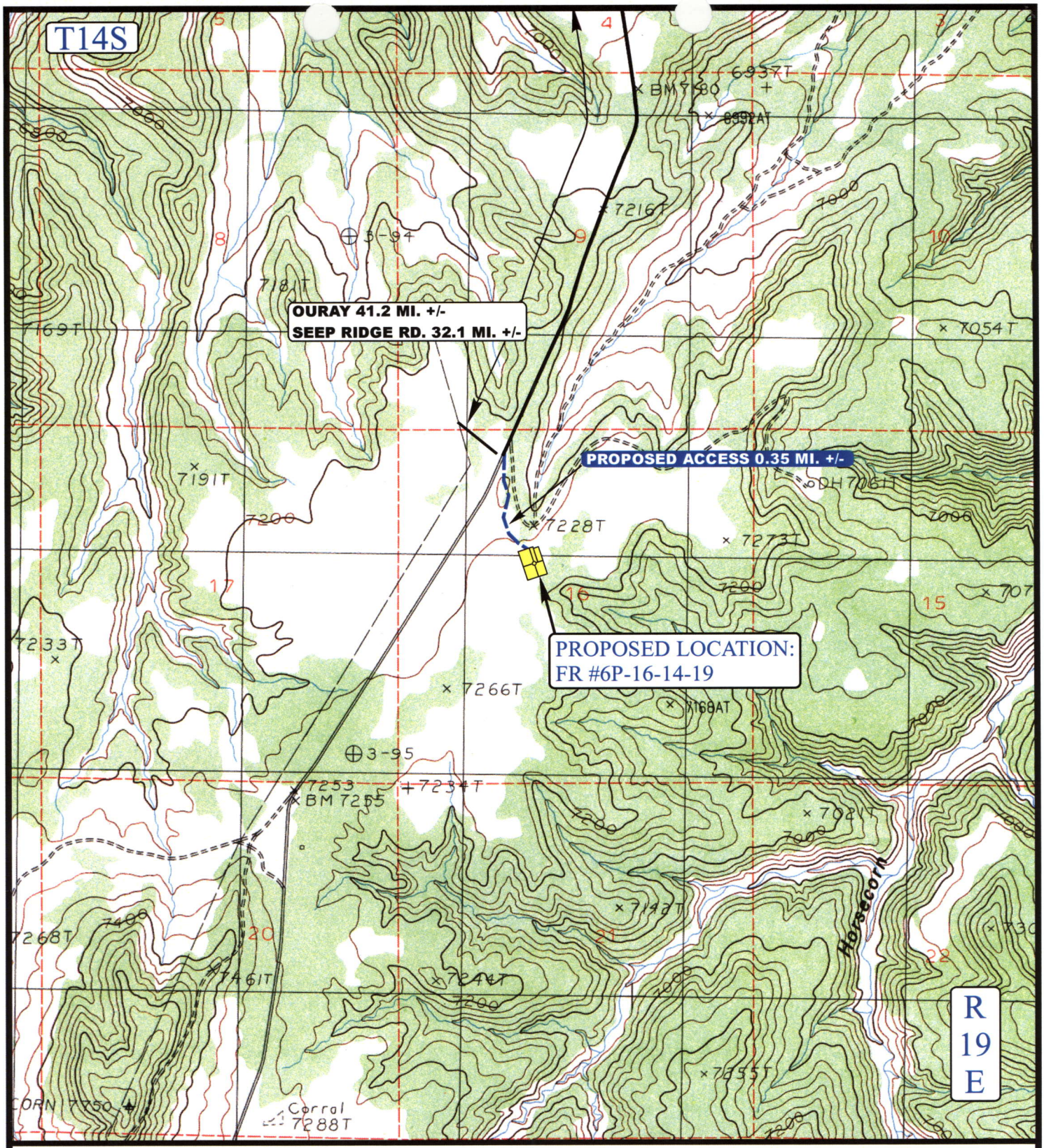
N

QUESTAR EXPLR. & PROD.

FR #6P-16-14-19
SECTION 16, T14S, R19E, S.L.B.&M.
1986 'FNL 1988' FWL

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

TOPOGRAPHIC MAP	08 MONTH	21 DAY	08 YEAR	A TOPO
SCALE: 1:100,000	DRAWN BY: J.H.	REVISED: 00-00-00		



LEGEND:

PROPOSED ACCESS ROAD

EXISTING ROAD

N

QUESTAR EXPLR. & PROD.

FR #6P-16-14-19

SECTION 16, T14S, R19E, S.L.B.&M.

1986' FNL 1988' FWL

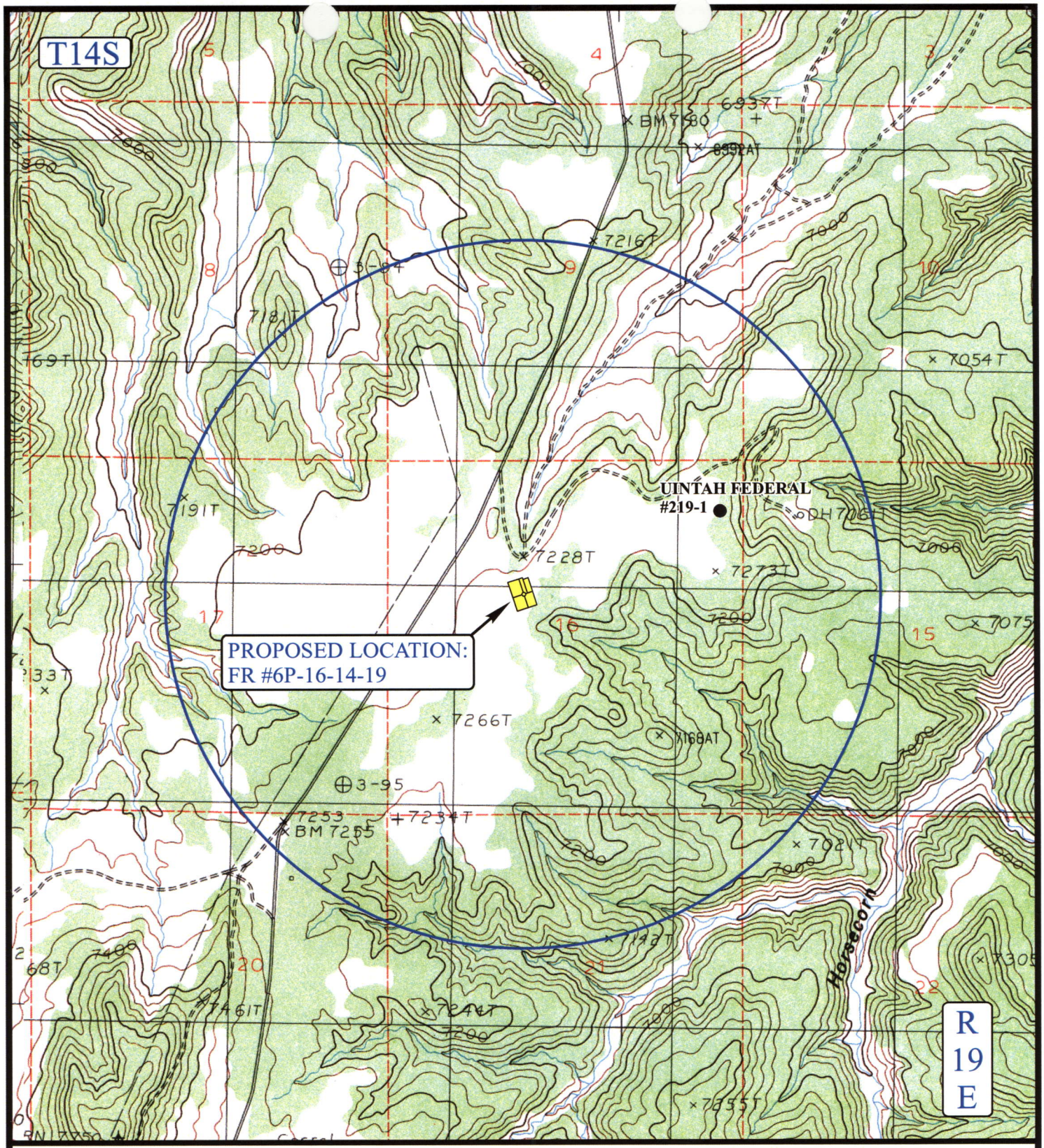
UELS

Uintah Engineering & Land Surveying

85 South 200 East Vernal, Utah 84078

(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	08 MONTH	21 DAY	08 YEAR	B TOPO
SCALE: 1" = 2000'	DRAWN BY: J.H.	REVISED: 00-00-00		



LEGEND:

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

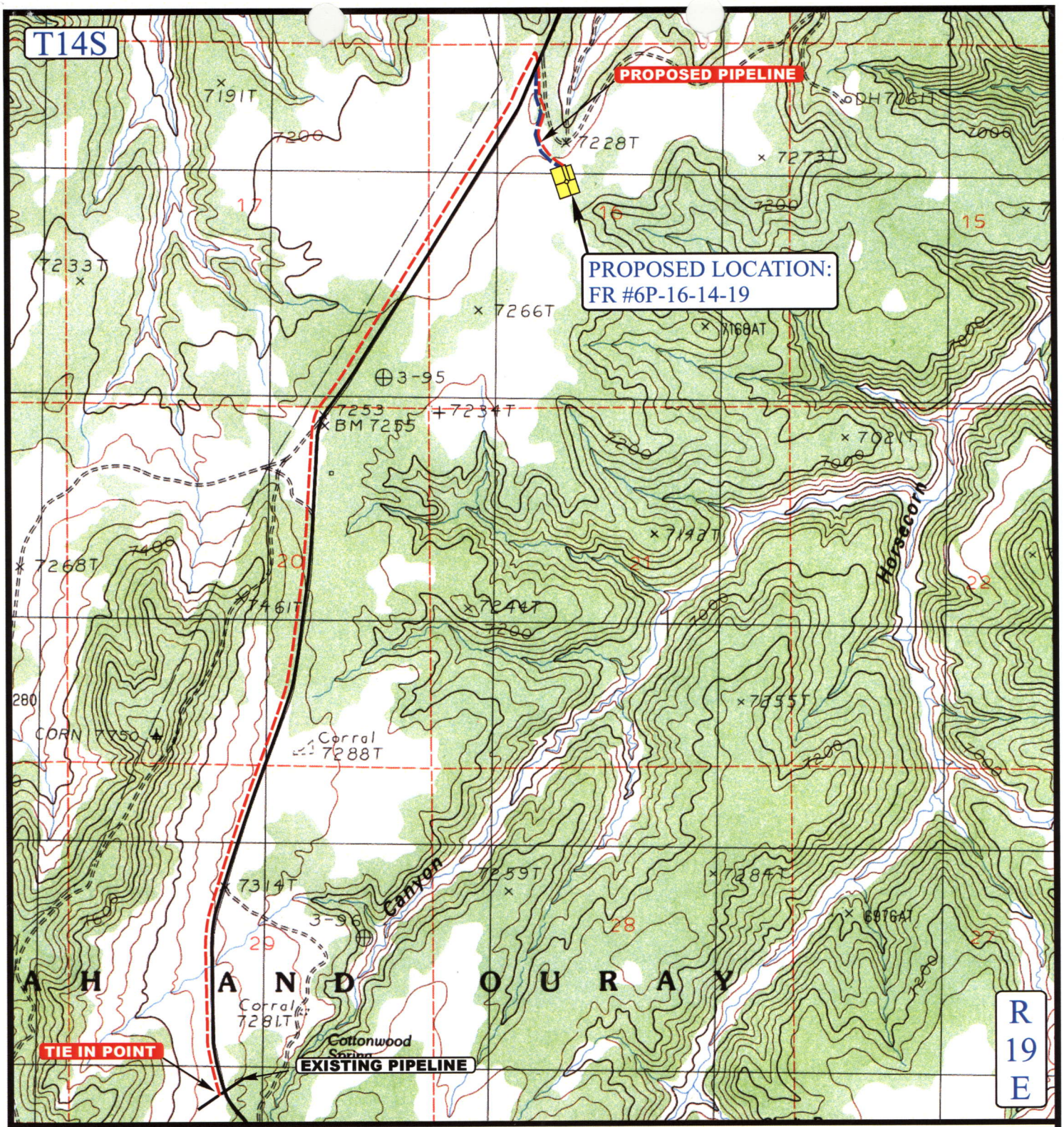
N

QUESTAR EXPLR. & PROD.

FR #6P-16-14-19
SECTION 16, T14S, R19E, S.L.B.&M.
1986' FNL 1988' FWL

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

TOPOGRAPHIC MAP	08 MONTH	21 DAY	08 YEAR	C TOPO
SCALE: 1" = 2000'	DRAWN BY: J.H.	REVISED: 00-00-00		



APPROXIMATE TOTAL PIPELINE DISTANCE = 18,213' +/-

LEGEND:

EXISTING PIPELINE

PROPOSED PIPELINE

PROPOSED ACCESS

N

QUESTAR EXPLR. & PROD.

FR #6P-16-14-19

SECTION 16, T14S, R19E, S.L.B.&M.

1986' FNL 1988' FWL

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(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	08 MONTH	21 DAY	08 YEAR	D TOPO
SCALE: 1" = 2000'	DRAWN BY: J.H.	REVISED: 00-00-00		

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 09/04/2008

API NO. ASSIGNED: 43-047-40350

WELL NAME: FR 6P-16-14-19
OPERATOR: QUESTAR EXPLORATION & (N5085)
CONTACT: JAN NELSON

PHONE NUMBER: 435-781-4331

PROPOSED LOCATION:
SENW 16 140S 190E
SURFACE: 1986 FNL 1988 FWL
BOTTOM: 1986 FNL 1988 FWL
COUNTY: UINTAH
LATITUDE: 39.60109 LONGITUDE: -109.7967
UTM SURF EASTINGS: 603317 NORTHINGS: 4383966
FIELD NAME: WILDCAT (1)

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
Engineering	DKD	10/13/08
Geology		
Surface		

LEASE TYPE: 3 - State
LEASE NUMBER: ML-49278
SURFACE OWNER: 2 - Indian

PROPOSED FORMATION: WINGT
COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

✓ Plat
✓ Bond: Fed[] Ind[] Sta[] Fee[]
(No. 965003033)
N Potash (Y/N)
N Oil Shale 190-5 (B) or 190-3 or 190-13
✓ Water Permit
(No. 49-2183)
___ RDCC Review (Y/N)
(Date: 09/24/2008)
N Fee Surf Agreement (Y/N)
NA Intent to Commingle (Y/N)

LOCATION AND SITING:

___ R649-2-3.
Unit: ___
✓ R649-3-2. General
Siting: 460 From Qtr/Qtr & 920' Between Wells
___ R649-3-3. Exception
___ Drilling Unit
Board Cause No: ___
Eff Date: ___
Siting: ___
___ R649-3-11. Directional Drill

COMMENTS: ___

STIPULATIONS:
1- Federal Approval
2- Spacing Stip
3- Cmt Stip #7 (7 5/8" intermediate)
4- Cmt Stip #3 (4 1/2" production, 3000' MD)
5- STATEMENT OF BASIS

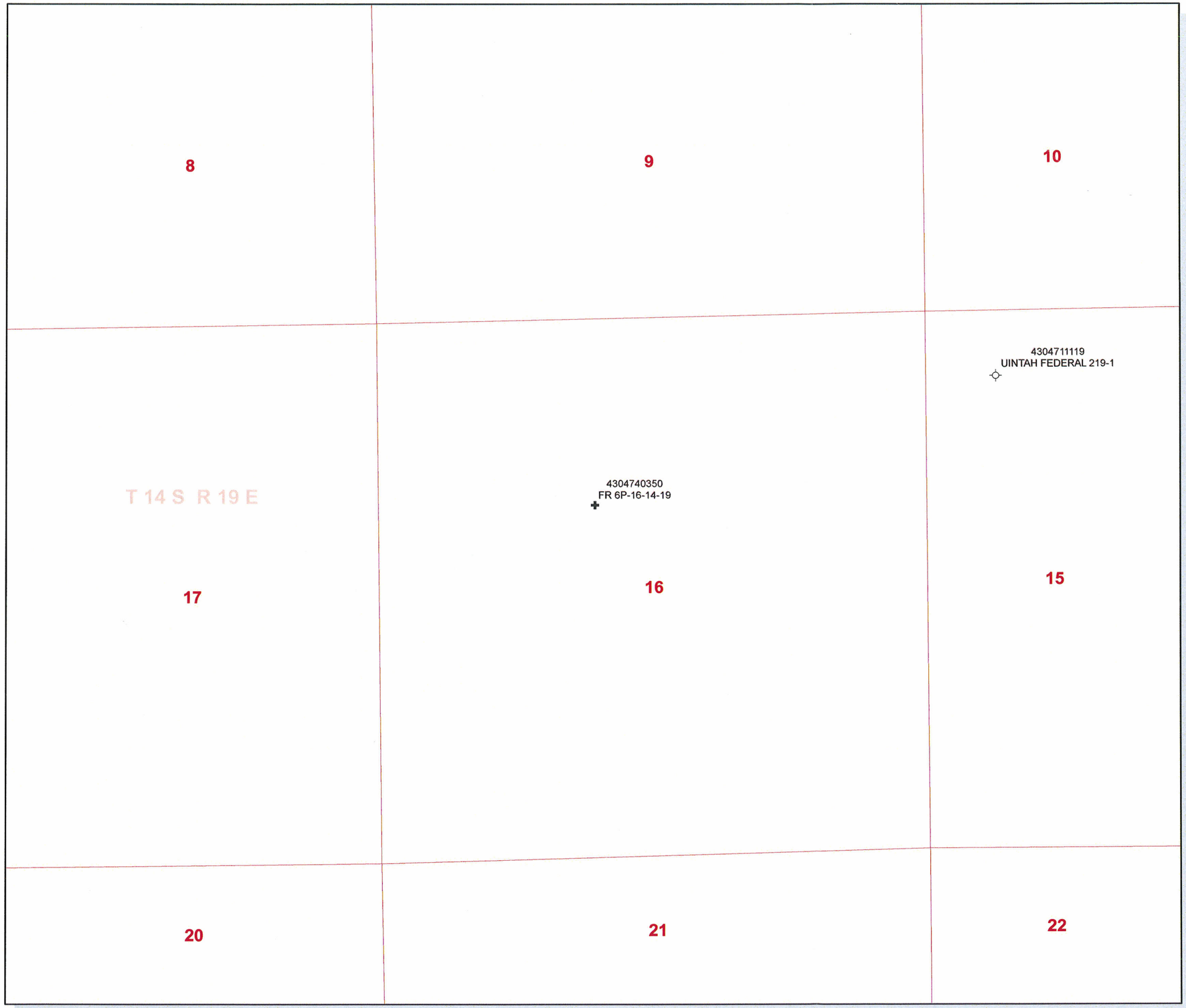
API Number: 4304740350

Well Name: FR 6P-16-14-19

Township 14.0 S Range 19.0 E Section 16

Meridian: SLBM

Operator: QUESTAR EXPLORATION & PRODUCTION CO



Map Prepared:
Map Produced by Diana Mason

Units

STATUS

- ACTIVE
- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

Fields

STATUS

- ACTIVE
- COMBINED
- Sections
- Township

Wells Query Events

- <all other values>

GIS_STAT_TYPE

- <Null>
- APD
- DRL
- GI
- GS
- LA
- NEW
- OPS
- PA
- PGW
- POW
- RET
- SGW
- SOW
- TA
- TW
- WD
- WI
- WS
- Bottom Hole Location

1,300 650 0 1,300 Feet

1:12,000

Application for Permit to Drill
Statement of Basis

APD No	API WellNo	Status	Well Type	Surf Ownr	CBM
1113	43-047-40350-00-00		GW	I	No

Operator QUESTAR EXPLORATION & PRODUCTIO **Surface Owner-APD**
Well Name FR 6P-16-14-19 **Unit**
Field WILDCAT **Type of Work**
Location SENW 16 14S 19E S 1986 FNL 1988 FWL GPS Coord (UTM) 603317E 4383966N

Geologic Statement of Basis

QEP proposes to set 500 feet of surface casing cemented to the surface. An intermediated string will be set at 4,800 feet. The base of the moderately saline water is estimated at 3,400 feet. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the proposed location. The surface formation at this location is the Green River Formation. The Green River Formation is made up of interbedded sandstones, shales, and limestones. The Green River Formation can be expected to contain useable aquifers which should be protected. The proposed casing and cement program should adequately protect usable ground water in the area.

Brad Hill — 10/13/2008
APD Evaluator — **Date / Time**

Surface Statement of Basis

The surface rights at the proposed location are owned by the Ute Tribe. The operator is responsible for obtaining all required surface permits and rights-of-way.

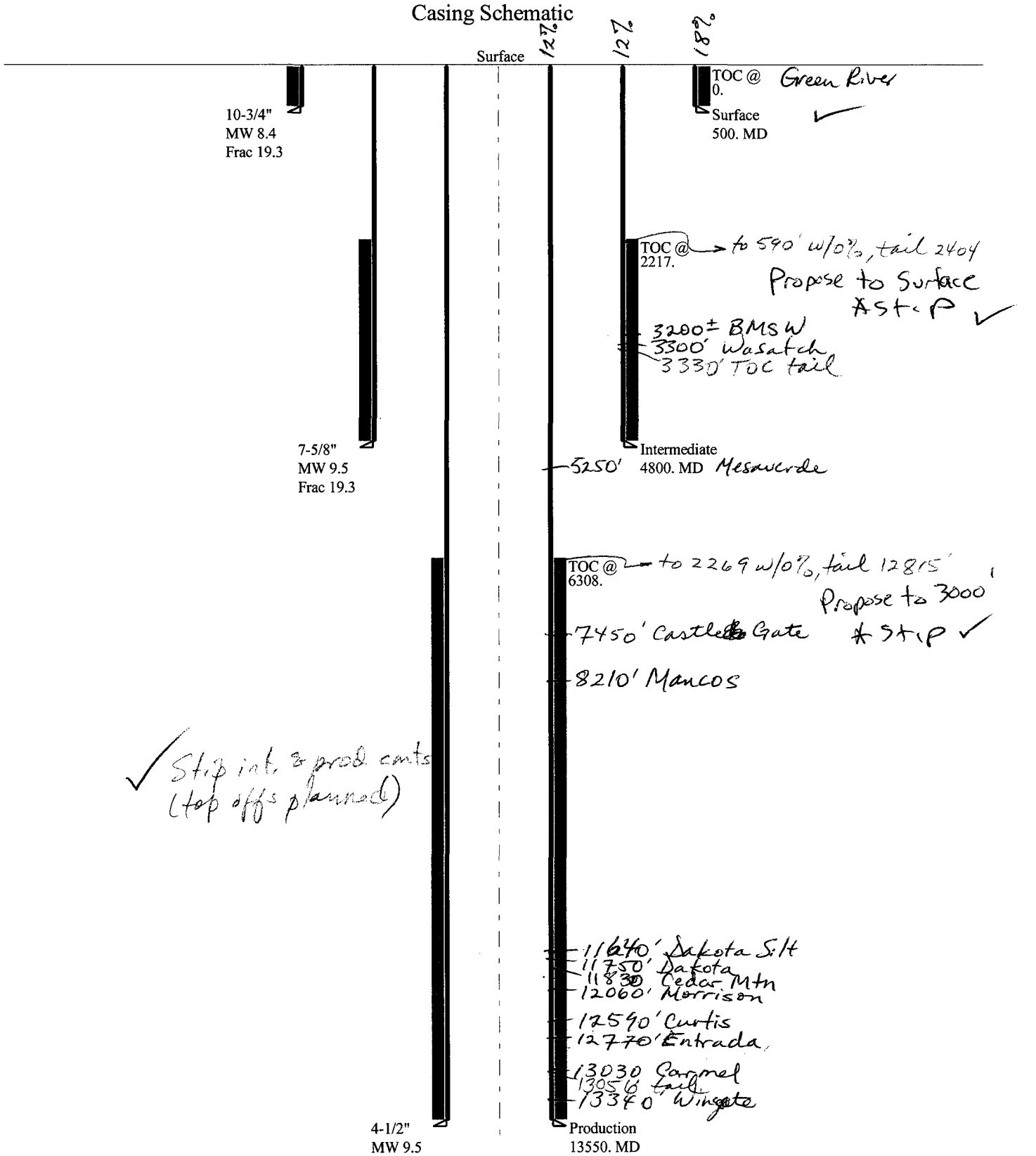
Brad Hill — 10/13/2008
Onsite Evaluator — **Date / Time**

Conditions of Approval / Application for Permit to Drill

Category	Condition
	None.

43047403500000 FR 6P-16-14-19

Casing Schematic



Well name:	**43047403500000 FR 6P-16-14-19**
Operator:	**Questar Exploration & Production, Co**
String type:	Surface
Project ID:	43-047-40350-0000
Location:	Uintah County

Design parameters:

Collapse

Mud weight: 8.400 ppg

Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 440 psi

Internal gradient: 0.120 psi/ft

Calculated BHP 500 psi

No backup mud specified.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Tension:

8 Round STC: 1.80 (J)

8 Round LTC: 1.80 (J)

Buttress: 1.60 (J)

Premium: 1.50 (J)

Body yield: 1.50 (B)

Tension is based on air weight.

Neutral point: 438 ft

Environment:

H2S considered? No

Surface temperature: 65 °F

Bottom hole temperature: 72 °F

Temperature gradient: 1.40 °F/100ft

Minimum section length: 185 ft

Cement top: Surface

Non-directional string.

Re subsequent strings:

Next setting depth: 4,800 ft

Next mud weight: 9.500 ppg

Next setting BHP: 2,369 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)	Internal Capacity (ft^3)
1	500	10.75	40.50	J-55	ST&C	500	500	9.925	275.4

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	218	1580	7.242	500	3130	6.26	20	420	20.74 J

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

Phone: 810-538-5357

Date: October 8,2008
Salt Lake City, Utah

ENGINEERING STIPULATIONS: NONE

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Collapse is based on a vertical depth of 500 ft, a mud weight of 8.4 ppg The casing is considered to be evacuated for collapse purposes.

Burst strength is not adjusted for tension.

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

Well name:	**43047403500000 FR 6P-16-14-19**
Operator:	**Questar Exploration & Production, Co**
String type:	Intermediate
Project ID:	43-047-40350-0000
Location:	Uintah County

Design parameters:

Collapse

Mud weight: 9.500 ppg

Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 4,224 psi

Internal gradient: 0.120 psi/ft

Calculated BHP 4,800 psi

No backup mud specified.

Minimum design factors:

Collapse:

Design factor 1.000

Burst:

Design factor 1.00

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: 4,119 ft

Environment:

H2S considered? No

Surface temperature: 74 °F

Bottom hole temperature: 141 °F

Temperature gradient: 1.40 °F/100ft

Minimum section length: 100 ft

Cement top: 2,217 ft

Non-directional string.

Re subsequent strings:

Next setting depth: 13,550 ft

Next mud weight: 9.500 ppg

Next setting BHP: 6,687 psi

Fracture mud wt: 19.250 ppg

Fracture depth: 4,800 ft

Injection pressure: 4,800 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft^3)
1	4800	7.625	29.70	P-110	LT&C	4800	4800	6.75	1237.4

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	2369	5350	2.259	4800	9470	1.97	143	769	5.39 J

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

Phone: 810-538-5357

Date: October 8,2008
Salt Lake City, Utah

ENGINEERING STIPULATIONS: NONE

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Collapse is based on a vertical depth of 4800 ft, a mud weight of 9.5 ppg The casing is considered to be evacuated for collapse purposes.

Burst strength is not adjusted for tension.

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

Well name:	**43047403500000 FR 6P-16-14-19**
Operator:	**Questar Exploration & Production, Co**
String type:	Production
Project ID:	43-047-40350-0000
Location:	Uintah County

Design parameters:

Collapse

Mud weight: 9.500 ppg

Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 3,706 psi

Internal gradient: 0.220 psi/ft

Calculated BHP 6,687 psi

No backup mud specified.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Tension:

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

Tension is based on air weight.

Neutral point: 11,650 ft

Environment:

H2S considered?	No
Surface temperature:	65 °F
Bottom hole temperature:	255 °F
Temperature gradient:	1.40 °F/100ft
Minimum section length:	368 ft
Cement top:	6,308 ft

Non-directional string.

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft^3)
1	13550	4.5	13.50	P-110	LT&C	13550	13550	3.795	1135.6

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	6687	10680	1.597	6687	12410	1.86	183	338	1.85 J

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

Phone: 810-538-5357

Date: October 8,2008
Salt Lake City, Utah

ENGINEERING STIPULATIONS: NONE

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Collapse is based on a vertical depth of 13550 ft, a mud weight of 9.5 ppg The casing is considered to be evacuated for collapse purposes.

Burst strength is not adjusted for tension.

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

BOPE REVIEW — Questar FR 6P-16-14-19 — API 43-047-40350-0000

Well Name	Questar FR 6P-16-14-19 API 43-047-40350-0000		
	String 1	String 2	String 3
Casing Size (")	10 3/4	7 5/8	4 1/2
Setting Depth (TVD)	500	4800	13550
Previous Shoe Setting Depth (TVD)	20	500	4800
Max Mud Weight (ppg)	8.33	9.5	9.5
BOPE Proposed (psi)	500	5000	10000
Casing Internal Yield (psi)	3130	9180	12410
Operators Max Anticipated Pressure (psi)	5500		7.8 ppg ?

Calculations	String 1	10 3/4 "		
Max BHP [psi]	.052*Setting Depth*MW =	217		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	157	YES ✓	Diverter head
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	107	YES	
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth) =	111	← NO O.K.	
Required Casing/BOPE Test Pressure		500	psi	
*Max Pressure Allowed @ Previous Casing Shoe =		20	psi	*Assumes 1psi/ft frac gradient

Calculations	String 2	7 5/8 "		
Max BHP [psi]	.052*Setting Depth*MW =	2371		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	1795	YES ✓	
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	1315	YES	
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth) =	1425	← NO O.K.	
Required Casing/BOPE Test Pressure		4800	psi	
*Max Pressure Allowed @ Previous Casing Shoe =		500	psi	*Assumes 1psi/ft frac gradient

Calculations	String 3	4 1/2 "		
Max BHP [psi]	.052*Setting Depth*MW =	6694		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	5068	YES ✓	
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	3713	YES	
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth) =	4769	← YES ✓	
Required Casing/BOPE Test Pressure		8687	psi	
*Max Pressure Allowed @ Previous Casing Shoe =		4800	psi	*Assumes 1psi/ft frac gradient

STATE ACTIONS
Resource Development Coordinating Committee
Public Lands Policy Coordination Office
5110 State Office Building
SLC, UT 84114
Phone No. 537-9230

1. State Agency Oil, Gas and Mining 1594 West North Temple, Suite 1210 Salt Lake City, UT 84114-5801	**2. Approximate date project will start:** Upon Approval or September 23, 2008
3. Title of proposed action: Application for Permit to Drill	
4. Description of Project: Questar E & P, Company proposes to drill the FR 6P-16-14-19 well (wildcat) on State lease ML-49278, Uintah County, Utah. This action is being presented to the RDCC for consideration of resource issues affecting state interests. The Division of Oil, Gas and Mining is the primary administrative agency in this action and must issue approval before operations commence.	
5. Location and detailed map of land affected (site location map required, electronic GIS map preferred) (include UTM coordinates where possible) **(indicate county)** 1986' FNL 1988' FWL, SE/4 NW/4, Section 16, Township 14 South, Range 19 East, Uintah County, Utah	
6. Possible significant impacts likely to occur: Surface impacts include up to five acres of surface disturbance during the drilling and completion phase (estimated for five weeks duration). If oil and gas in commercial quantities is discovered, the location will be reclaimed back to a net disturbance of between one and two acres – not including road, pipeline, or utility infrastructure. If no oil or gas is discovered, the location will be completely reclaimed.	
7. Identify local government affected **a. Has the government been contacted?** No. **b. When?** **c. What was the response?** **d. If no response, how is the local government(s) likely to be impacted?**	
8. For acquisitions of land or interests in land by DWR or State Parks please identify state representative and state senator for the project area. Name and phone number of state representative, state senator near project site, if applicable: **a. Has the representative and senator been contacted?** N/A	
9. Areawide clearinghouse(s) receiving state action: (to be sent out by agency in block 1) Uintah Basin Association of Government	
10. For further information, contact: **Diana Mason** **Phone:** (801) 538-5312	**11. Signature and title of authorized officer** Gil Hunt, Associate Director **Date:** September 9, 2008

STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES

FORM 3

DIVISION OF OIL, GAS, AND MINING

APPLICATION FOR PERMIT TO DRILL

5. MINERAL LEASE NO: **ML-49278**

6. SURFACE: **TRIBAL**

1A. TYPE OF WORK: DRILL ☑ ☐ REENTER ☐ DEEPEN

B. TYPE OF WELL ☐ OIL ☑ GAS OTHER _____ ☐ SINGLE ZONE ☑ MULTIPLE ZONE

7. IF INDIAN, ALLOTTEE OR TRIBE NAME: **UTE TRIBE**

8. UNIT or CA AGREEMENT NAME: **N/A**

2. NAME OF OPERATOR: **QUESTAR EXPLORATION & PRODUCTION, COMPANY**

9. WELL NAME and NUMBER: **FR 6P-16-14-19**

3. ADDRESS OF OPERATOR: **11002 E. 17500 S.** CITY **VERNAL** STATE **UT** ZIP **84078**

PHONE NUMBER: **(435) 781-4331**

10. FIELD AND POOL, OR WILDCAT: **WILDCAT**

4. LOCATION OF WELL (FOOTAGES)
AT SURFACE: **1986' FNL 1988' FWL** 603317X 39.601089
AT PROPOSED PRODUCING ZONE: 4383964 -109.796648

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: **SENW 16 14S 19E**

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: **41.2 +/- MILES SOUTH OF OURAY, UTAH**

12. COUNTY: **UINTAH**

13. STATE: **UTAH**

15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE(FEET): **1986' + / --**

16. NUMBER OF ACRES IN LEASE: **640.0**

17. NUMBER OF ACRES ASSIGNED TO THIS WELL: **40**

18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET)

19. PROPOSED DEPTH: **13,550'**

20. BOND DESCRIPTION: **965003033**

21. ELEVATIONS (SHOW WHETHER DF, RT, GR,ETC.): **7244.6' GR**

22. APPROXIMATE DATE WORK WILL START: **ASAP**

23. ESTIMATED DURATION: **75 DAYS**

24 **PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT	SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT
	SEE ATTACHED DRILLING PROGRAM		SEE ATTACHED DRILLING PROGRAM

25 **ATTACHMENTS**

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

☑ WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER

☑ COMPLETE DRILLING PLAN

☑ EVIDNECE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER

☐ FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OW

NAME (PLEASE PRINT) Jan Nelson TITLE Regulatory Affairs

SIGNATURE Jan Nelson DATE 9/2/08

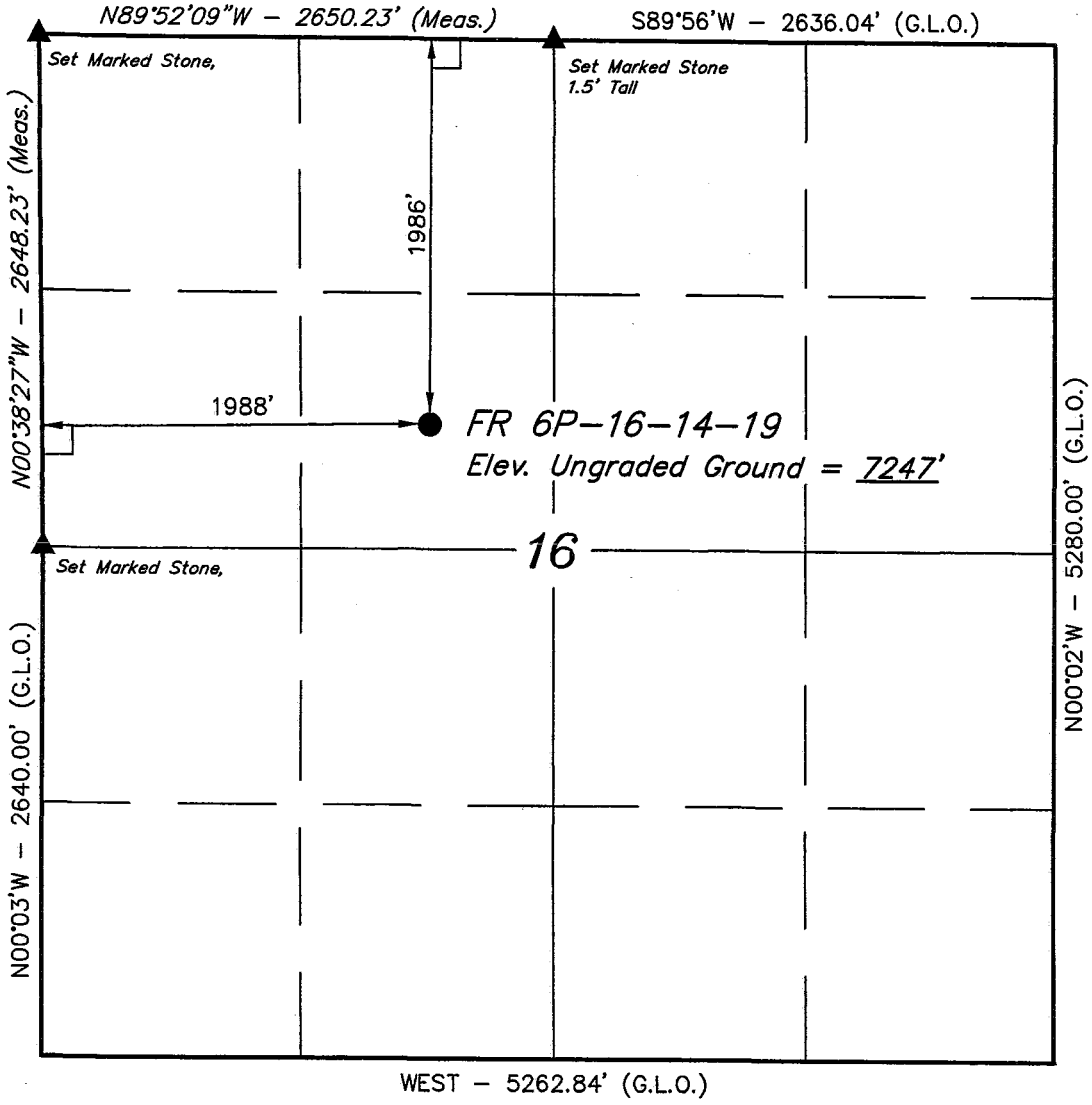
(This space for State use only)

API NUMBER ASSIGNED: 43-047-40350 APPROVAL: _____

RECEIVED
SEP 04 2008
DIV. OF OIL, GAS & MINING

CONFIDENTIAL

T14S, R19E, S.L.B.&M.



QUESTAR EXLR. & PROD.

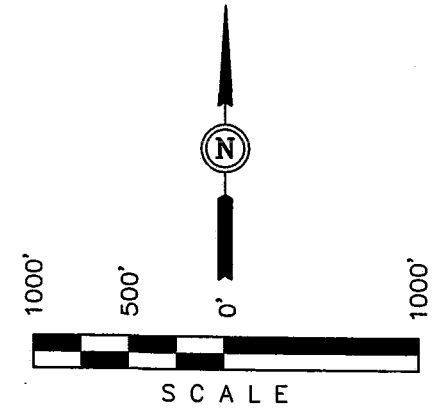
Well location, FR #6P–16–14–19, located as shown in the SE 1/4 NW 1/4 of Section 16, T14S, R19E, S.L.B.&M., Uintah County, Utah.

BASIS OF ELEVATION

BENCH MARK (59 WF) LOCATED ION THE NW 1/4 OF SECTION 10, T15S, R20E, S.L.B.&M., TAKEN FROM THE FLAT ROCK MESA QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 7449 FEET.

BASIS OF BEARINGS

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



CERTIFICATE

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

REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

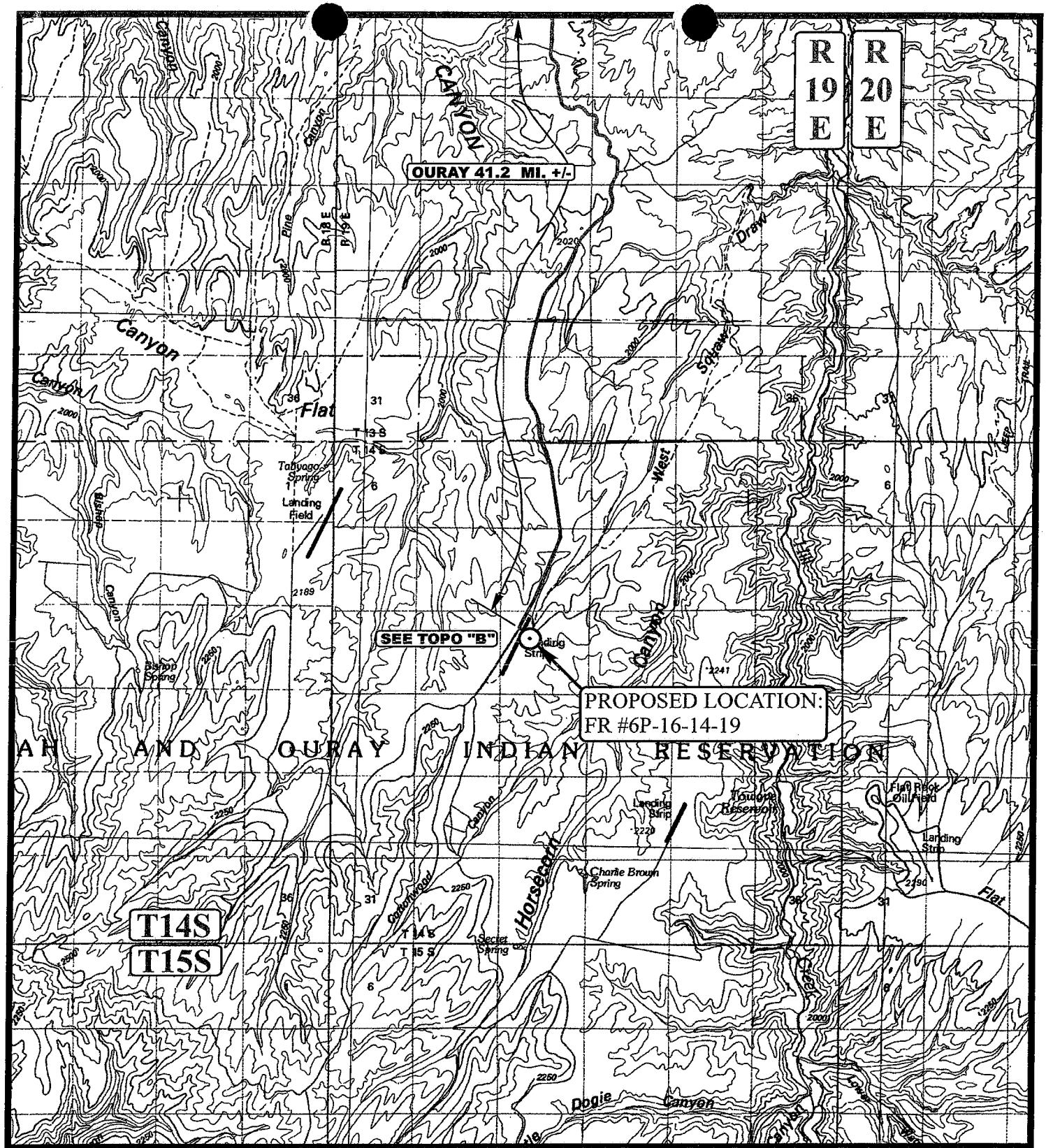
UINTAH ENGINEERING AND SURVEYING
85 SOUTH 200 EAST – VERNAL, UTAH 84078
(435) 789–1017

SCALE 1" = 1000'	DATE SURVEYED: 08–18–08	DATE DRAWN: 08–21–08
PARTY J.W. B.J. D.P.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE QUESTAR EXLR. & PROD.	

LEGEND:

└ = 90° SYMBOL
● = PROPOSED WELL HEAD.
▲ = SECTION CORNERS LOCATED.

(NAD 83)
LATITUDE = 39°36'03.14" (39.600872)
LONGITUDE = 109°47'49.32" (109.797033)
(NAD 27)
LATITUDE = 39°36'03.27" (39.600908)
LONGITUDE = 109°47'46.82" (109.796339)



LEGEND:

⊙ PROPOSED LOCATION

N

QUESTAR EXPLR. & PROD.

FR #6P-16-14-19
SECTION 16, T14S, R19E, S.L.B.&M.
1986 'FNL 1988' FWL

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

TOPOGRAPHIC MAP	08 MONTH	21 DAY	08 YEAR	A TOPO
SCALE: 1:100,000	DRAWN BY: J.H.	REVISED: 00-00-00		

From: Robert Clark
To: Mason, Diana
Date: 9/15/2008 8:40 AM
Subject: RDCC short turn-around comments.

CC: Anderson, Tad; Mcneill, Dave; Wright, Carolyn

The following comments are in response to short turn-around items **RDCC #9739 and RDCC #9743 - 9747.**

RDCC #9739, Comments begin: The DJ Simmons, INC proposal to drill the State 1-2 wildcat well, in San Juan County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board. If any compressor or pump stations are constructed at the site, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to R307-401: Permit: Notice of Intent and Approval Order, of the Utah Air Quality Rules. A copy of the rules is found at www.rules.utah.gov/publicat/code/r307/r307.htm .

The proposed project, in San Juan County, is subject to R307-205-5: Fugitive Dust, of the Utah Air Quality Rules, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at www.rules.utah.gov/publicat/code/r307/r307.htm .
Comments end.

RDCC #9743, Comments begin: The Questar E & P proposal to drill the FR-6P-16-14-19 wildcat well, in Uintah County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board. If any compressor or pump stations are constructed at the site, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to R307-401: Permit: Notice of Intent and Approval Order, of the Utah Air Quality Rules. A copy of the rules is found at www.rules.utah.gov/publicat/code/r307/r307.htm .

The proposed project, in Uintah County, is subject to R307-205-5: Fugitive Dust, of the Utah Air Quality Rules, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at www.rules.utah.gov/publicat/code/r307/r307.htm .
Comments end.

RDCC #9744, Comments begin: The Oso Oil & Gas Properties, LLC proposal to drill the Centennial wildcat well, in Carbon County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board. If any compressor or pump stations are constructed at the site, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to R307-401: Permit: Notice of Intent and Approval Order, of the Utah Air Quality Rules. A copy of the rules is found at www.rules.utah.gov/publicat/code/r307/r307.htm .

The proposed project, in Carbon County, is subject to R307-205-5: Fugitive Dust, of the Utah Air Quality Rules, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at www.rules.utah.gov/publicat/code/r307/r307.htm .
Comments end.

RDCC #9745, Comments begin: The Oso Oil & Gas Properties, LLC proposal to drill the P3 wildcat well, in Carbon County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board. If any compressor or pump stations are constructed at the site, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to R307-401: Permit: Notice of Intent and Approval Order, of the Utah Air Quality Rules. A copy of the rules is found at www.rules.utah.gov/publicat/code/r307/r307.htm .

The proposed project, in Carbon County, is subject to R307-205-5: Fugitive Dust, of the Utah Air Quality Rules, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area

greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at www.rules.utah.gov/publicat/code/r307/r307.htm .
Comments end.

RDCC #9746, Comments begin: The Oso Oil & Gas Properties, LLC proposal to drill the P4 wildcat well, in Carbon County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board. If any compressor or pump stations are constructed at the site, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to R307-401: Permit: Notice of Intent and Approval Order, of the Utah Air Quality Rules. A copy of the rules is found at www.rules.utah.gov/publicat/code/r307/r307.htm .

The proposed project, in Carbon County, is subject to R307-205-5: Fugitive Dust, of the Utah Air Quality Rules, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at www.rules.utah.gov/publicat/code/r307/r307.htm .
Comments end.
RDCC #9747, Comments begin: The Oso Oil & Gas Properties, LLC proposal to drill the P5 wildcat well, in Carbon County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board. If any compressor or pump stations are constructed at the site, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to R307-401: Permit: Notice of Intent and Approval Order, of the Utah Air Quality Rules. A copy of the rules is found at www.rules.utah.gov/publicat/code/r307/r307.htm .
The proposed project, in Carbon County, is subject to R307-205-5: Fugitive Dust, of the Utah Air Quality Rules, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at www.rules.utah.gov/publicat/code/r307/r307.htm .
Comments end.

Robert Clark
Division of Air Quality
801-536-4435

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil Gas and Mining

JOHN R. BAZA
Division Director

October 13, 2008

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

Re: FR 6P-16-14-19 Well, 1986' FNL, 1988' FWL, SE NW, Sec. 16, T. 14 South, R. 19 East, Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann.§ 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-40350.

Sincerely,

Gil Hunt
Associate Director

pab
Enclosures

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

1594 West North Temple, Suite 1210, PO Box 145801, Salt Lake City, UT 84114-5801
telephone (801) 538-5340 • facsimile (801) 359-3940 • TTY (801) 538-7458 • *www.ogm.utah.gov*

UTAH DNR OIL, GAS & MINING

Operator: Questar Exploration & Production, Company

Well Name & Number FR 6P-16-14-19

API Number: 43-047-40350

Lease: ML-49278

Location: SE NW **Sec.** 16 **T.** 14 South **R.** 19 East

Conditions of Approval

1. **General**

   Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. **Notification Requirements**

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

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

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

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

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

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

3. **Reporting Requirements**

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

4. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.

5. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)

6. Cement volume for the 4 1/2" production string shall be determined from actual hole diameter in order to place cement from the pipe setting depth back to 3000' MD as indicated in the submitted drilling plan.

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

8. The cement volumes for the 7 5/8" intermediate casing shall be determined from actual hole conditions and the setting depth of the casing in order to place cement from the pipe setting depth back to the surface.

9. 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.

10. Operator shall comply with applicable recommendations resulting from Resource Development Coordinating Committee review. Statements attached.

API Well No: 43047403500000

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

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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

5.LEASE DESIGNATION AND SERIAL NUMBER: ML-49278

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: FR 6P-16-14-19

2. NAME OF OPERATOR: QUESTAR EXPLORATION & PRODUCTION CO

9. API NUMBER: 43047403500000

3. ADDRESS OF OPERATOR: 11002 East 17500 South , Vernal, UT, 84078

PHONE NUMBER: 435 781-4362 Ext

9. FIELD and POOL or WILDCAT: WILDCAT

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 1986 FNL 1988 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SENW Section: 16 Township: 14.0S Range: 19.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 10/13/2010	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ SPUD REPORT Date of Spud:	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	✓ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

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

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

Approved by the Utah Division of Oil, Gas and Mining

Date: October 12, 2009

By:

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Jan Nelson	435 781-4331	Permit Agent
SIGNATURE N/A		**DATE** 10/12/2009

RECEIVED October 12, 2009

The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047403500000

API: 43047403500000
Well Name: FR 6P-16-14-19
Location: 1986 FNL 1988 FWL QTR SENW SEC 16 TWNP 140S RNG 190E MER S
Company Permit Issued to: QUESTAR EXPLORATION & PRODUCTION CO
Date Original Permit Issued: 10/13/2008

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- **If located on private land, has the ownership changed, if so, has the surface agreement been updated?** ○ **Yes** ◉ **No**
- **Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?** ○ **Yes** ◉ **No**
- **Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?** ○ **Yes** ◉ **No**
- **Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?** ○ **Yes** ◉ **No**
- **Has the approved source of water for drilling changed?** ○ **Yes** ◉ **No**
- **Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?** ○ **Yes** ◉ **No**
- **Is bonding still in place, which covers this proposed well?** ◉ **Yes** ○ **No**

Approved by the Utah Division of Oil, Gas and Mining

Signature: Jan Nelson **Date:** 10/12/2009
Title: Permit Agent **Representing:** QUESTAR EXPLORATION & PRODUCTION CO

Date: October 12, 2009

By: Dallyl Hill

RECEIVED October 12, 2009

Division of Oil, Gas and Mining

OPERATOR CHANGE WORKSHEET (for state use only)

ROUTING
CDW

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

The operator of the well(s) listed below has changed, effective: **6/14/2010**

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

CA No. **Unit:**

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

OPERATOR CHANGES DOCUMENTATION

Enter date after each listed item is completed

1. (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 6/28/2010
2. (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 6/28/2010
3. The new company was checked on the **Department of Commerce, Division of Corporations Database on:** 6/24/2010

4a. Is the new operator registered in the State of Utah: Business Number: 764611-0143

5a. (R649-9-2)Waste Management Plan has been received on: Requested

5b. Inspections of LA PA state/fee well sites complete on: n/a

5c. Reports current for Production/Disposition & Sundries on: ok

6. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM 8/16/2010 BIA not yet
7. **Federal and Indian Units:**
   The BLM or BIA has approved the successor of unit operator for wells listed on: 8/16/2010
8. **Federal and Indian Communization Agreements ("CA"):**
   The BLM or BIA has approved the operator for all wells listed within a CA on: N/A
9. **Underground Injection Control ("UIC")** Division has approved UIC Form 5 Transfer of Authority to **Inject,** for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: 6/29/2010

DATA ENTRY:

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

BOND VERIFICATION:

1. Federal well(s) covered by Bond Number: ESB000024
2. Indian well(s) covered by Bond Number: 965010693

3a. (R649-3-1) The **NEW** operator of any state/fee well(s) listed covered by Bond Number 965010695

3b. The **FORMER** operator has requested a release of liability from their bond on: n/a

LEASE INTEREST OWNER NOTIFICATION:

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

COMMENTS:

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

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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

5. LEASE DESIGNATION AND SERIAL NUMBER: See attached

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: See attached

7. UNIT or CA AGREEMENT NAME: See attached

8. WELL NAME and NUMBER: See attached

9. API NUMBER: Attached

10. FIELD AND POOL, OR WILDCAT: See attached

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

2. NAME OF OPERATOR: Questar Exploration and Production Company N5085

3. ADDRESS OF OPERATOR: 1050 17th Street, Suite 500 CITY Denver STATE CO ZIP 80265 PHONE NUMBER: (303) 672-6900

4. LOCATION OF WELL

FOOTAGES AT SURFACE: See attached

COUNTY: Attached

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

STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
☑ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start: 6/14/2010	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☐ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☑ OTHER: Operator Name Change
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

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

Effective June 14, 2010 Questar Exploration and Production Company changed its name to QEP Energy Company. This name change involves only an internal corporate name change and no third party change of operator is involved. The same employees will continue to be responsible for operations of the properties described on the attached list. All operations will continue to be covered by bond numbers:

Federal Bond Number: 965002976 (BLM Reference No. ESB000024) N3700

Utah State Bond Number: ~~965003033~~ 965010695

Fee Land Bond Number: ~~965003033~~

BIA Bond Number: ~~799446~~ 965010693

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

NAME (PLEASE PRINT): Morgan Anderson TITLE: Regulatory Affairs Analyst

SIGNATURE: Morgan Anderson DATE: 6/23/2010

(This space for State use only)

RECEIVED
JUN 28 2010
DIV. OF OIL, GAS & MINING

APPROVED 6/30/2009
Earlene Russell
Division of Oil, Gas and Mining
Earlene Russell, Engineering Technician

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

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

well_name	sec	twp	rng	api	entity	mineral lease	type	stat	C
Wr 16G-32-10-17	32	100S	170E	4301350370		State	OW	NEW	C
STATE 1	36	070S	240E	4304715128	5878	State	GW	P	
KAYE STATE 1-16	16	100S	230E	4304730609	5395	State	GW	P	
TOLL STATION ST 8-36-8-21	36	080S	210E	4304732724	12361	State	GW	S	
GB 8A-36-8-21	36	080S	210E	4304733037	12377	State	GW	P	
GB 6-36-8-21	36	080S	210E	4304733038	12378	State	GW	P	
GB 2-36-8-21	36	080S	210E	4304733252	12527	State	GW	P	
GH 1W-32-8-21	32	080S	210E	4304733570	12797	State	GW	P	
GH 3W-32-8-21	32	080S	210E	4304733571	12796	State	GW	P	
GH 5W-32-8-21	32	080S	210E	4304733572	12828	State	GW	P	
GH 7W-32-8-21	32	080S	210E	4304733573	12872	State	GW	P	
GH 2W-32-8-21	32	080S	210E	4304733744	13029	State	GW	P	
GH 4W-32-8-21	32	080S	210E	4304733745	13035	State	GW	P	
GH 8W-32-8-21	32	080S	210E	4304733746	13030	State	GW	P	
OU GB 3W-16-8-22	16	080S	220E	4304733751	13577	State	GW	P	
OU GB 5W-16-8-22	16	080S	220E	4304733752	13570	State	GW	P	
GH 6W-32-8-21	32	080S	210E	4304733753	13036	State	GW	P	
OU GB 11W-16-8-22	16	080S	220E	4304733754	13582	State	GW	P	
GH 5G-32-8-21	32	080S	210E	4304733866	13037	State	OW	P	
GB 1W-36-8-21	36	080S	210E	4304733944	13439	State	GW	P	
WV 2W-2-8-21	02	080S	210E	4304734034	13678	State	GW	P	
GB 6W-25-8-21	25	080S	210E	4304734121	13440	Fee	GW	P	
GB 7W-25-8-21	25	080S	210E	4304734122	13436	Fee	GW	P	
WV 9W-16-7-21	16	070S	210E	4304734324		State	GW	LA	
OU GB 11W-30-8-22	30	080S	220E	4304734392	13433	Fee	GW	P	
OU GB 4W-16-8-22	16	080S	220E	4304734598	13579	State	GW	P	
OU GB 10W-16-8-22	16	080S	220E	4304734616		State	GW	LA	
OU GB 12W-16-8-22	16	080S	220E	4304734617	13697	State	GW	P	
OU GB 13W-16-8-22	16	080S	220E	4304734618	13611	State	GW	P	
GB 14MU-16-8-22	16	080S	220E	4304734619	14196	State	GW	P	
OU GB 15W-16-8-22	16	080S	220E	4304734622	13595	State	GW	P	
OU GB 16W-16-8-22	16	080S	220E	4304734655	13815	State	GW	P	
OU GB 2W-16-8-22	16	080S	220E	4304734657	13721	State	GW	P	
OU GB 6W-16-8-22	16	080S	220E	4304734658	13592	State	GW	P	
OU GB 8W-16-8-22	16	080S	220E	4304734660	13769	State	GW	TA	
OU GB 9W-16-8-22	16	080S	220E	4304734692		State	GW	LA	
OU GB 15G-16-8-22	16	080S	220E	4304734829	13777	State	OW	S	
GB 7MU-36-8-21	36	080S	210E	4304734893	14591	State	GW	P	
GB 3W-36-8-21	36	080S	210E	4304734894	13791	State	GW	P	
NC 8M-32-8-22	32	080S	220E	4304734897		State	GW	LA	
NC 3M-32-8-22	32	080S	220E	4304734899		State	GW	LA	
GB 5W-36-8-21	36	080S	210E	4304734925	13808	State	GW	P	
GB 4MU-36-8-21	36	080S	210E	4304734926	14589	State	GW	P	
NC 11M-32-8-22	32	080S	220E	4304735040		State	GW	LA	
GB 5SG-36-8-21	36	080S	210E	4304735155	14015	State	GW	P	
SC 13ML-16-10-23	16	100S	230E	4304735281	14036	State	GW	P	
SC 3ML-16-10-23	16	100S	230E	4304735282	14014	State	GW	P	
SC 11ML-16-10-23	16	100S	230E	4304735311	14035	State	GW	P	
WH 13G-2-7-24	02	070S	240E	4304735484	14176	State	D	PA	
FR 9P-36-14-19	31	140S	200E	4304735880	14310	State	GW	P	
CB 13G-36-6-20	36	060S	200E	4304735969		State	OW	LA	

Bonds: BLM = ESB000024
BIA = 956010693
State = 965010695

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

well_name	sec	twp	rng	api	entity	mineral lease	type	stat	C
WH 2G-2-7-24	02	070S	240E	4304736259		State	GW	LA	
WH 4G-2-7-24	02	070S	240E	4304736261		State	GW	LA	
FR 1P-36-14-19	31	140S	200E	4304736300	14859	State	GW	P	
WK 3ML-2-9-24	02	090S	240E	4304736723		State	GW	LA	
WK 7ML-2-9-24	02	090S	240E	4304736724		State	GW	LA	
SC 5ML-16-10-23	16	100S	230E	4304736877	15125	State	GW	P	
SC 12ML-16-10-23	16	100S	230E	4304736878	15053	State	GW	P	
SC 14ML-16-10-23	16	100S	230E	4304736908	15070	State	GW	P	
SC 4ML-16-10-23	16	100S	230E	4304736912	15208	State	GW	P	
FR 3P-36-14-19	36	140S	190E	4304737376	15736	State	GW	P	
BZ 12ML-16-8-24	16	080S	240E	4304737670		State	GW	LA	
BZ 10D-16-8-24	16	080S	240E	4304737671	15979	State	GW	S	
BZ 14ML-16-8-24	16	080S	240E	4304737672		State	GW	LA	
BBE 9W-16-7-21	16	070S	210E	4304737745		State	GW	LA	
GB 10ML-16-8-22	16	080S	220E	4304737943		State	GW	LA	
GB 9ML-16-8-22	16	080S	220E	4304737944	15851	State	GW	P	
HR 2MU-2-12-23	02	120S	230E	4304738052		State	GW	LA	
HR 3MU-2-12-23	02	120S	230E	4304738053		State	GW	LA	
HR 6MU-2-12-23	02	120S	230E	4304738054		State	GW	LA	
HR 10MU-2-12-23	02	120S	230E	4304738055	15737	State	GW	S	
HR 12MU-2-12-23	02	120S	230E	4304738056		State	GW	LA	
HR 14MU-2-12-23	02	120S	230E	4304738057		State	GW	LA	
HR 16MU-2-12-23	02	120S	230E	4304738058		State	GW	LA	
FR 11P-36-14-19	36	140S	190E	4304738349	15899	State	GW	P	
GB 4SG-36-8-21	36	080S	210E	4304738764	16142	State	GW	P	
GB 7SG-36-8-21	36	080S	210E	4304738765	16144	State	GW	P	
WF 3D-32-15-19	32	150S	190E	4304738877		State	GW	APD	C
SCS 5C-32-14-19	32	140S	190E	4304738963	16759	State	GW	P	
FR 7P-36-14-19	31	140S	200E	4304738992	15955	State	GW	P	
SCS 10C-16-15-19	16	150S	190E	4304739683	16633	State	GW	P	
FR 6P-16-14-19	16	140S	190E	4304740350		State	GW	APD	C

Bonds: BLM = ESB000024
BIA = 956010693
State = 965010695

API Well No: 43047403500000

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: ML-49278

SUNDRY NOTICES AND REPORTS ON WELLS

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

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: FR 6P-16-14-19

2. NAME OF OPERATOR: QEP ENERGY COMPANY

9. API NUMBER: 43047403500000

3. ADDRESS OF OPERATOR: 11002 East 17500 South , Vernal, Ut, 84078

PHONE NUMBER: 303 308-3068 Ext

9. FIELD and POOL or WILDCAT: WILDCAT

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 1986 FNL 1988 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SENW Section: 16 Township: 14.0S Range: 19.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 10/13/2011	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ SPUD REPORT Date of Spud:	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	✓ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

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

QEP ENERGY COMPANY HEREBY REQUESTS A ONE YEAR EXTENSION FOR THE APD ON THE ABOVE CAPTIONED WELL.

Approved by the Utah Division of Oil, Gas and Mining

Date: October 11, 2010

By:

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Jan Nelson	435 781-4331	Permit Agent
SIGNATURE N/A		**DATE** 10/11/2010

RECEIVED October 11, 2010

The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047403500000

API: 43047403500000
Well Name: FR 6P-16-14-19
Location: 1986 FNL 1988 FWL QTR SENW SEC 16 TWNP 140S RNG 190E MER S
Company Permit Issued to: QEP ENERGY COMPANY
Date Original Permit Issued: 10/13/2008

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- **If located on private land, has the ownership changed, if so, has the surface agreement been updated?** ○ **Yes** ◉ **No**
- **Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?** ○ **Yes** ◉ **No**
- **Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?** ○ **Yes** ◉ **No**
- **Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?** ○ **Yes** ◉ **No**
- **Has the approved source of water for drilling changed?** ○ **Yes** ◉ **No**
- **Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?** ○ **Yes** ◉ **No**
- **Is bonding still in place, which covers this proposed well?** ◉ **Yes** ○ **No**

Approved by the Utah Division of Oil, Gas and Mining

Signature: Jan Nelson **Date:** 10/11/2010
Title: Permit Agent **Representing:** QEP ENERGY COMPANY

Date: October 11, 2010
By:

RECEIVED October 11, 2010

GARY R. HERBERT
Governor

GREG 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

November 17, 2011

QEP Energy Company
11002 East 17500 South
Vernal, UT 84078

Re: APD Rescinded – FR 6P-16-14-19, Sec. 16, T.14S, R.19E
Uintah County, Utah API No. 43-047-40350

Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on October 13, 2008. On October 12, 2009 and October 11, 2010 the Division granted a one-year APD extension. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective November 17, 2011.

A new APD must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Diana Mason
Environmental Scientist

cc: Well File
SITLA, Ed Bonner

1594 West North Temple, Suite 1210, PO Box 145801, Salt Lake City, UT 84114-5801
telephone (801) 538-5340 • facsimile (801) 359-3940 • TTY (801) 538-7458 • *www.ogm.utah.gov*

UTAH DNR OIL, GAS & MINING