STATE OF UTAH       FORM 3         DEPARTMENT OF NATURAL RESOURCES       AMENDED REPORT         DIVISION OF OIL, GAS AND MINING       Image: Comparison of Com										
APPLI	1	. WELL NAME and Cl	NUMBER ay Basin Unit #69							
2. TYPE OF WORK DRILL NEW WELL	REENTER P	&A WELL (	N WELL	6		3	. FIELD OR WILDO	CLAY BASIN		
4. TYPE OF WELL	ell Coall	hed Methane Well: NO				5	. UNIT or COMMU	NITIZATION AGRE	EMENT NAME	
6. NAME OF OPERATOR	WEXPRO (	COMPANY				7	. OPERATOR PHON	NE 307 922-5612		
8. ADDRESS OF OPERATOR	Box 458, Rock	Springs, WY, 82902				9	. OPERATOR E-MA Terry	IL .Nimmo@Ouestar.co	om	
10. MINERAL LEASE NUMBER		11. MINERAL OWNE	RSHIP		~ ~	1	2. SURFACE OWN	ERSHIP	- -	
FEE		FEDERAL () IND		STATE (	💛 🕫 🖲					
13. NAME OF SURFACE OWNER (If box 12	= 'fee') Division of Wild	dlife Resources				1	4. SURFACE OWNE	801-538-4712	12 = 'fee')	
15. ADDRESS OF SURFACE OWNER (if box 1594 W North 1	t <b>12 = 'fee')</b> Temple, Suite 21	110, Salt Lake City, , UT	84114			1	6. SURFACE OWNE st	ER E-MAIL (if box i anbailey@utah.gov	12 = 'fee')	
17. INDIAN ALLOTTEE OR TRIBE NAME		18. INTEND TO COM MULTIPLE FORMATI	IMINGLE	PRODUCT	ION FROM	1	9. SLANT			
		YES 问 (Submit C	Commingli	ng Applicat	ion) NO 间	) v	ertical 📵 dir	ECTIONAL 🔘 H	ORIZONTAL 问	
20. LOCATION OF WELL	F	FOOTAGES			SECTIO	N	TOWNSHIP	RANGE	MERIDIAN	
LOCATION AT SURFACE	1363 F	NL 1343 FWL	SE	NW	20		3.0 N	24.0 E	S	
Top of Uppermost Producing Zone	1363 F	NL 1343 FWL	SE	NW	20		3.0 N	24.0 E	S	
At Total Depth	1363 F	NL 1343 FWL	SE	NW	20		3.0 N	24.0 E	S	
21. COUNTY DAGGETT		22. DISTANCE TO N	EAREST 1 26	LEASE LIN	E (Feet)	2	23. NUMBER OF ACRES IN DRILLING UNIT 730			
		25. DISTANCE TO N (Applied For Drilling	G or Com 125	WELL IN S pleted)	AME POOL	2	<b>26. PROPOSED DEPTH</b> MD: 5640 TVD: 5640			
27. ELEVATION - GROUND LEVEL 6308		28. BOND NUMBER	965003	29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE Daggett County				IF APPLICABLE		
		۲. Al	ТТАСНМ	IENTS		_				
VERIFY THE FOLLOWING	ARE ATTACH	IED IN ACCORDAN	CE WIT	'H THE U	FAH OIL AN	ND GA	S CONSERVATI	ON GENERAL RI	JLES	
WELL PLAT OR MAP PREPARED BY	LICENSED SU	RVEYOR OR ENGINEEF	R	🖌 сом	PLETE DRILI	LING P	LAN			
AFFIDAVIT OF STATUS OF SURFACE	OWNER AGR	EEMENT (IF FEE SURF	ACE)	FORM	1 5. IF OPER	ATOR	IS OTHER THAN TH	HE LEASE OWNER		
DIRECTIONAL SURVEY PLAN (IF DI	RECTIONALLY	OR HORIZONTALLY		🖌 торс	OGRAPHICAL	. MAP				
NAME Paul Jibson         TITLE Associate Permit Agent						рног	NE 307 922-5647			
SIGNATURE	I	DATE 08/07/2009				EMA]	L Paul.Jibson@Que	star.com		
API NUMBER ASSIGNED 43009500010000	,	APPROVAL			f	Permit	SHUL t Manager			

	Proposed Hole, Casing, and Cement								
String	Hole Size	Top (MD)	Bottom (MD)						
Surf	12.25	9.625	0	500					
Pipe	Grade	Length	Weight						
	Grade J-55 LT&C	500	36.0						

	Proposed Hole, Casing, and Cement							
String	Hole Size	Top (MD)	Bottom (MD)					
Prod	7.875	4.5	0	5640				
Pipe	Grade	Length	Weight					
	Grade P-110 LT&C	5640	13.5					

# Drilling Plan Wexpro Company Clay Basin Unit Well No. 69 Daggett County, Utah

# 1. SURFACE FORMATION, ESTIMATED TOPS AND WATER, OIL, GAS OR MINERAL BEARING FORMATIONS:

Formation	Depth (TVD)	Remarks
Mancos	Surface	Gas, Secondary Objective
Frontier	5,375'	Gas, Major Objective
Mowry	5,541'	
Total Depth	5,640'	

All fresh water and prospectively valuable minerals encountered during drilling will be recorded by depth and adequately protected.

PRESSURE CONTROL EQUIPMENT: (See attached diagram) Operator's minimum specifications for pressure control equipment require an 11-inch 3000 psi double gate hydraulically operated blowout preventer and an 11-inch 3000 psi annular preventer. BOP equipment will be tested to its rated working pressure. The annular preventer will be tested at 50% of its rated working pressure.

NOTE: The surface casing will be pressure tested to a minimum of 1500 psi. BOP's will be checked daily as to mechanical operating condition and will be tested by an independent pressure testing company after each string of casing is run; when initially installed; whenever any seals subject to test is broken; following related repairs; and at 30 day intervals. All ram type preventers will have hand wheels which will be operative and accessible at the time the preventers are installed.

# AUXILIARY EQUIPMENT:

- a. Manually operated kelly cock
- b. No floats at bit
- c. Monitoring of mud system will be with PVT system
- d. Full opening floor valves in the full open position, capable of fitting all drill stem connections manually operated
- e. Formation integrity test will be done 20' below surface casing shoe to 11.0 ppg

# 2. CASING PROGRAM:

Hole Size	Size	Тор	Bottom	Weight	Grade	Thread	Condition
26"	20"	sfc	60'				Steel Conductor
12-1/4"	9-5/8"	sfc	500'	36#	J-55	LTC	New
7-7/8"	4-1/2"	sfc	5,640' TVD	13.5#	P-110	LTC	New

Casing Strengths:			Collapse	Burst	Tensile (minimum)	
9-5/8"	36 lb.	J-55	STC	2,020 psi	3,520 psi	423,000 lb.
4-1/2"	13.5 lb.	P-110	LTC	10,680 psi	12,410 psi	338,000 lb

(See attached casing design sheet)

Wexpro requests a variance from 43 CFR 3160 Onshore Oil and Gas Order #2, Section III requirements, subsection E - Special Drilling Operations for the specific operation of drill and setting surface casing with a truck mounted air rig.

The variance to Onshore #2 is requested because surface casing depth for this well is 500' and high pressure is not expected.

<u>A properly lubricated and maintained rotating head</u>: A diverter bowl will be utilized in place of a rotating head. The diverter bowl will force the air and cutting returns to the reserve pit as it is used to drill the surface casing.

<u>Blooie line discharge will be 100 feet from the well bore and securely anchored:</u> The blooie line discharge for this operation will be located 50 to 70 feet from the wellhead.

Automatic ignitor or continuous pilot light on the blooie line: A diffuser will be used rather than an automatic pilot/ignitor. Water is injected into the compressed air and eliminates the need for the pilot light and the need for dust suppression equipment.

<u>Compressor located in the direction from the blooie line is a minimum of 100' from the well</u> <u>bore:</u> Truck mounted air compressors will be located within 50 feet on the opposite side of the wellhead from the blooie line and equipped with a (1) emergency kill switch on the driller's console, (2) pressure relief valve on the compressor and (3) spark arrestors on the motors.

# 3. CEMENTING PROGRAMS:

20" Conductor: Cement to surface with construction cement.

# 9-5/8" Surface Casing: sfc - 500' (TVD) (12-1/4" Hole)

0-500' - 289 sacks (333 cu ft) Class "G" + 2%  $CaCl_2$  + 1/4 % Cello Flake. Slurry wt: 15.8 ppg, Slurry yield: 1.15 cu. Ft./sack, Slurry volume: 45' of 9 5/8'', 36 lb/ft Casing

(20 cu. ft), 500' of 12 ¼'' x 9 5/8'' annulus (157 cu. ft.), 100% excess (157 cu. ft.), Total 334 cu. ft.

Centralizers: 6 Bow Spring Centralizers; two on the shoe joint, on next 5 collar. One centralizer in Surface Casing at 100'.

# 4-1/2" Production Casing: 500' – 5,640' (TVD) (7-7/8" Hole)

**Tail:** 500' – 5,640' – 1345 sacks (2017.7 cu. ft.) of 35/65 Poz-G with reducer, fluid loss additive and retarder. Slurry wt: 14.2 ppg, Slurry yield: 1.5 cu. ft. per sack.

# 4. MUD PROGRAM:

1. <u>Surface to 500 feet</u>

Surface hole will be drilled and cased with Rat-Hole rig.

2. <u>500 to Total Depth</u> Drill out of surface casing 10' and test formation to 10.0 ppg mud equivalent. Circulate water through reserve pit. Run gel and polymer sweeps as necessary. Drill from 500' to 4,500' with 35 vis mud.

Mud weight of 9.0-10.0 ppg may be required to drill from the Frontier to TD (5,640' TVD), so mud up should be accomplished at 4,500' TVD. Water loss should be low to protect the water sensitive sand section.

Example Properties:	
Mud Weight	9.0 - 10.0
Viscosity	35 - 45
Water Loss	<7
LCM	As Needed
Filter Cake	1/32
PH	10
Gel Strengths	Minimum

This mud should be maintained to total depth.

Sufficient mud materials to maintain mud properties, control lost circulation and to contain blowout will be available at the wellsite.

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

5. LOGGING: DIL-SFL-GR: - Total Depth to surface casing MICRO-LOG: - Total Depth to surface casing BHC- Sonic with Caliper - Total Depth to surface casing FDC-CNL-GR-PE w/ Caliper:- Total Depth to surface casing Formation tester: Interval to be selected from open hole logs.

TESTING: None

CORING: None

- 6. ABNORMAL PRESSURE AND TEMPERATURE: No abnormal pressures are anticipated. A BHT of 119 degrees F.
- 7. ANTICIPATED STARTING DATE: June 1, 2010

**DURATION OF OPERATION: 25 days** 

# **CLAY BASIN UNIT WELL NO. 69**

SURFAC	E CASING:									
	CASING: ANNULUS: EXCESS: CEMENT YIELD: TOTAL DEPTH TOP OF TAIL TOP OF LEAD		9-5/8" 12-1/4 LEAD TAIL	', 36#, I" (Gua	K-55 ige Hole)	0) 0.	.4340 c 3132 c 100% 2.56 c 1.15 c 500 F F 0 F	cu.ft./li cu.ft/s cu.ft/s cu.ft/s Feet Feet Feet	in.ft in.ft ack ack (Surfat	11.6 PPG 15.8 PPG
LEAD SLURR	Y					CU.FT				
	ANN ANN EXCESS	0	то	0	0.3132	0.00				
						0.00		C	) SACKS	0 CU.FT
TAIL SLURR	(	Ny Constantine of State				CU.FT				
	CSG	500	ТО	455	0.4340	19.53				
	ANN	500	ТО	-	0.3132	156.6				
	ANN EXCESS				100%	156.6				
	1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 -					332.73 DISPLACEM	IENT	289 35.2	BBLS	333 CU.FT

PRODUC	TION CAS	SINC	G:								
	CASING:		4-1/2	2", 13.5#	, P-110		0.0838	cu.ft./lin.ft			
	ANNULUS:		9-1/4	I" (From	Open H	ole Logs)	0.3562	cu.ft./lin.ft	-		
							0.3236	cu.ft./lin.ft	-		
	EXCESS:						10%		-		
	<b>CEMENT YIELD:</b>			1	EAD		2.41	cu.ft/sack - 11.	6 PPG		
					TAIL		1.50	cu.ft/sack - 14.	2 PPG		
	TOTAL DEPTH						5,640	Feet			
	TOP OF TAIL						500	Feet			
	TOP OF LEAD		OPE	N HOLE			500		-		
	energia (anticipation (anticipation)		SUR	FACE C	ASING		SURFACE	Feet			
LEAD SLURR	Y					CU.FT					
	ANN	500	то	500	0.3562	0.00					
		500	то	500	0.3236	0.00					
	ANN EXCESS				10%	0.00					
						0.00		0 SACKS		0 CL	J.FT.
TAIL SLURRY	1					CU.FT				i and a state of the	
	CSG	5,640	TO	5,595	0.0838	3.771			and the state of the second state of the		
	ANN	5,640	TO	500	0.3562	1830.9					
	ANN EXCESS				10%	183.09					- 20
	a a daa					2017.73		<b>1345 SACKS</b>	2017	.7 CL	J.FT.
						DISPLAC	EMENT	83.5 BBLS			
				the control of the second states of the		-					

# QUESTAR WEXPRO 3,000 psi BOP

**Minimum Requirements** 





APIWellNo:43009500010000











'APIWellNo:43009500010000'





'APIWellNo:43009500010000'



Surface Use and Operations Wexpro Company Clay Basin Unit Well No. 69 Daggett County, Utah

\* The proposed well, pipeline and majority of the access road is located in Section 20, T3N R24E which is Division of Wildlife Resource property and BLM property. A Right-of Way Application has been filed with Stan Bailey, with the State of Utah, Department of Natural Resources.

# 1. <u>Existing Road</u>:

- A. <u>Proposed Well Site as Staked</u>: Refer to well location plat and area map.
- B. <u>Proposed Access Route</u>: Refer to general area map. All access roads are within the Clay Basin unit boundaries.
- C. <u>Plans for Improvement and/or Maintenance</u>: All existing roads will be utilized. Approximately 0.3 miles of existing 2-track road will need to be upgraded. Of the 0.3 miles of existing 2-track road, approximately 363' will be on BLM surface within section 19. Approximately 690' will be on BLM surface within section 20 and 356' will be on DWR surface within section 20. Please refer to TOPO B.

# 2. <u>Planned Access Roads</u>:

- A. Approximately 145' of new access road will need to be constructed in section 20. The 145' of new access road will all be located on DWR surface. Please refer to TOPO B. The access road will necessitate a 30-foot wide right-ofway (maximum disturbance).
- B. Maximum grade: Will not exceed 10 percent.
- C. Turnouts: Water turnouts will be constructed as required to divert runoff water from the road ditch in such a manner as to not cause erosion.
- D. Location (centerline): Access road has been staked and flagged. Surface disturbance and vehicular travel will be limited to the approved access route, additional area needed will be approved in advance.
- E. One 18" CMP is required where the access road enters the location.
- F. Surface materials: Surface materials will be obtained from cuts along the access

road and location. Spot surfacing may be required to maintain the running surface. In the event that conditions should necessitate graveling, of all or part of the access road and location, surfacing materials will be purchased from commercial suppliers in the marketing area. Gravel will be supplied from the Searle Brothers Gravel Pit #5, SE NW 29-19N-111W, Sweetwater County, Wyoming, unless otherwise approved in a Sundry Notice.

- G. Topsoil (approximately 6-inches) removed in conjunction with road construction will be spread in the borrow ditches or windrowed to the side. Borrow areas will be seeded as discussed in reclamation procedures.
- 4. <u>Location of Existing Wells</u>: Refer to area map for the location of existing wells within a one-mile radius.
- 5. <u>Location of Existing and/or Proposed Facilities</u>: Refer to area maps. Facilities will be installed as detailed on the attached diagram.

Electronic Flow Measurement will be installed to measure the gas production associated with this well.

All permanent (onsite for six months or longer) structures constructed or installed will be painted Covert Green, a flat, non-reflective, earth tone color to match the standard environmental colors, as determined by the Rocky Mountain Five State Interagency Committee. All facilities will be painted within six months of installation. Facilities are required to comply with Occupational Safety and Health Act will be excluded.

If a tank battery is constructed on this lease, it will be surrounded by a dike of sufficient capacity to contain 110% of the largest storage tank.

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

In Utah, the process of obtaining an air permit for a well site begins when Wexpro submits a Notice of Intent letter to the Utah Division of Air Quality (UDAQ) describing the air emission sources at the site. Best Available Control Technology (BACT) will be evaluated and considered on any activity that emits an air contaminant. If required, emission control equipment will be installed according to the Utah Administrative Code's most recent version of Title R307 for Air Quality. The UDAQ will review and issue an Approval Order that includes all permit conditions. The timing to evaluate and issue the Approval Order generally takes 4-6 months. If emission levels at a well site are less than 5 tons per year of criteria pollutants, the site is exempt from permitting.

The EPA has primary jurisdiction for Tribal Lands within the Uinta Basin. On Tribal Land, a permit is not required if the criteria pollutant emissions is less than 100 tons per year. A well site typically has less than 100 tons per year of criteria pollutants and is

therefore exempt from permitting.

All site security guidelines identified in 43 CFR 3162.7 regulations will be adhered to.

All off-lease storage, off-lease measurement, or commingling on-lease or off-lease will have prior written approval from Authorized Officer.

# Pipeline

The proposed pipeline will be constructed and operated by Questar Gas Management Company. The proposed pipeline will be approximately 126' in length. The proposed surface pipeline will be 3.5" O.D., Grade B or X-42 with a 0.188-inch wall thickness. The width of the right-of-way requested is 50 feet for construction and will revert to 30 feet for operation and maintenance purposes. The surface pipeline will be natural in color and the buried pipeline will be wrapped.

The maximum operating pressure that the natural gas pipeline is designed for is 1170 psig. Associated facilities include above ground valves and piping at the lateral junctions.

- 5. <u>Location and Type of Water Supply</u>: Water will be hauled by tank trucks from the town of Rock Springs WY, Dutch John UT, or from Red Creek (Temporary Application Number 41-3640, T78128). Water may also come from additional locations as per approval from Daggett County.
- 6. <u>Source of Construction Materials</u>: All materials will be derived from cuts at the location and along the access road. Construction material will be located on lease.
- 7. <u>Methods for Handling Water Disposal</u>: Cuttings and drilling fluids will be placed in a lined mud pit which will be constructed with at least one half of its holding capacity below ground level. The mud pit will be fenced on three sides with a sheep-tight fence of woven wire prior to the onset of drilling. Immediately upon completion of drilling, the fourth side will be fenced and the liquids allowed to evaporate or free water will be transferred to other reserve pits, within the unit for drilling purposes. The fence will be maintained until restoration. Any produced liquids will be contained in test tanks and hauled out by tank trucks. Garbage and other waste materials will be placed in a trash cage, the contents of which will be disposed of in the nearest legal landfill. Portable sewage facilities will be utilized for the disposal of human waste.

Produced waste water will be confined to a water tank/blow down tank.

The reserve pit will be lined with a 16 mil or thicker plastic nylon reinforced liner. If rock is encountered felt or straw may be used to prevent puncturing, ripping or tearing of the liner.

- 8. <u>Ancillary Facilities</u>: Camp facilities will not be required.
- 9. Wellsite Layout: Refer to drawing

Diversion ditches and erosion control devices are one example of structural best management practices (BMP) used for erosion and sediment control. Diversion ditches will be constructed to direct run off away from unprotected slopes and to direct sediment laden runoff to a sediment trapping structure.

Typically, perimeter storm water controls are installed during clearing and grading of the well pad or immediately after construction. A third party or company representative will then select and install additional best management practice (BMP) storm water controls. BMP's will be evaluated and modified, if necessary, following reclamation. Please refer to the most recent Storm Water Pollution Prevention Plan, submitted under separate cover for the Clay Basin Unit for specific BMP's.

# 10. Plans for Restoration of the Surface:

During construction, all woody vegetation and the top six inches of topsoil material will be removed from the pad and stockpiled separately. All pits will remain fenced until cleanup begins. Overhead flagging will be installed if oil is in the mud pit.

Immediately upon completion of drilling, the location and surrounding area will be cleared of all debris, trash and materials not required for production. The reserve pit and that portion of the location and access road not needed for production or production facilities will be reclaimed.

The reserve pit will be backfilled as soon as possible, within one year after drilling and completion as per the Wyoming Oil & Gas Commission regulations. If the pit is not dry the water will be mechanically evaporated or hauled to an approved disposal pit, and interim reclamation will take place.

The portion of the access road not needed for production access will be reclaimed in conjunction with the well pad. During construction topsoil is stripped and moved to the exterior of the 30' right of way. Any disturbance outside of the borrow ditch will have topsoil spread across the area for reclamation. Road base will be pulled up from the 30' right-of-way below topsoil and used to build up and crown the road. Gravel will be hauled in by contractor for additional road base if needed. The topsoil will be spread over the backside of the borrow ditch and seed will be distributed from the back side of the borrow ditch) to the end of the right-of-way where disturbance has occurred. The reclaimed area of the access road will be reseeded with the same seed mixture as the well pad, listed below.

Interim reclamation will consist of all unused portions of the location, up to the "dead men" being re-contoured to blend with the surrounding terrain, the location ripped, top soil spread and all areas of disturbance, not required for operation or fire control, will be reseeded with the seed mixture below.

SPECIES	lbs. PLS/acre			
Siberian Wheatgrass	3 lbs PLS/acre			
Indian Ricegrass	1 lbs PLS/acre			
Crested Wheatgrass	3 lbs PLS/acre			
Thickspike Wheatgrass	3 lbs PLS/acre			
Intermediate Wheatgrass	3 lbs PLS/acre			
Alfalfa	1 lbs PLS/acre			
Forage Kochia	1/2 lbs PLS/acre			
Wyoming Big Sage	1/2 lbs PLS/acre			
TOTAL	15 lbs PLS/acre			

The Wyoming Big Sage Brush will be broadcast after the drill seeding of all other species. Where drilling is not possible a broadcast/rake method will be used doubling the seed mixture.

- 11. Surface and Mineral Ownership: Surface ownership along the access road is DWR/BLM (Section 20) and BLM (Section 19). Surface ownership at the well site is DWR/BLM. A Right-of-Way (ROW) Application has been submitted to the "Utah Department of Natural Resources, Division of Wildlife Resources". Minerals are Fee.
- 12. <u>Other Information</u>: Anna Figueroa of the Bureau of Land Management, Vernal Field Office in Vernal, Utah along with the Division of Wildlife Resources will be notified at least 48-hours prior to commencement of <u>both</u> construction and reclamation operations.

A Class III Cultural Resource Inventory has been completed and the report forwarded to the Bureau of Land Management.

No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling of this well.



![](_page_24_Picture_1.jpeg)

Wexpro Company

1955 Blairtown Road P. O. Box 458 Rock Springs, WY 82902 Tel 307-922-5647 Fax 307-352-7575

Paul Jibson Associate Permit Agent

August 4, 2009

Utah Oil and Gas P.O. Box 145801 Salt Lake City, UT 84114-5801

Regarding: Clay Basin 69 APD, Right-of-Way Application

To Whom It May Concern:

With the Surface Ownership at the well site being Division of Wildlife Resources, a Right-of-Way Application has been submitted to the "Utah Department of Natural Resources, Division of Wildlife Resources". Stan Bailey with the Department of Natural Resources has been Wexpro's contact person. Stan Bailey can be reached at 801-538-4712.

If you require further information, please contact me.

Sincerely,

aut

Paul Jibson Associate Permit Agent Office # (307) 922-5657 Cell # (801) 755-0071 Paul.Jibson@Questar.com

# United States Department of the Interior

![](_page_25_Picture_2.jpeg)

BUREAU OF LAND MANAGEMENT Green River District-Vernal Field Office 170 South 500 East Vernal, UT 84078 (435) 781-4400 Fax: (435) 781-4410 http://www.blm.gov/ut/st/en/fo/vernal.html

IN REPLY REFER TO 3160 UTG011

August 20, 2009

Paul Jibson Wexpro Company PO Box 458 Rock Springs, WY 82902

1855

Re: Request to Return APD Well No. Clay Basin Unit 69 SENW, Sec. 20, T3N, R24E Daggett County, Utah Lease No. Fee Clay Basin Unit

Dear Mr. Jibson:

The Application for Permit to Drill (APD) for the above referenced well received February 23, 2009 is being returned unapproved/unaccepted per your request in an email message to Administrative Assistant Marta Call dated August 19, 2009. A new duplicate State of Utah APD was received on this office on August 17, 2009; the well is located on fee minerals and DWR state surface. This APD will be "Accepted by BLM for Unit Purposes Only" after the State of Utah Approval is granted.

If you have any questions regarding APD processing, please contact me at (435) 781-4455.

Sincerely,

Cindy Severson

Cindy Severson Land Law Examiner

Enclosures

cc: UDOGM

# RECEIVED

AUG 27 2009

DIV. OF OIL, GAS & MINING

Lessee's or Operators Representative and Certification:

G. T. Nimmo, Operations Manager, P. O. Box 458, Rock Springs, Wyoming 82902, Telephone number (307) 922-5612.

#### Certification:

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 the 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 Wexpro Company and 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.

Please be advised that Wexpro Company is considered to be the operator of Clay Basin Unit Well No. 69; SE ¼, NW ¼, Section 20, Township 3N, Range 24E; Lease= Fee, Daggett County; and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by BLM Bond ESB000024, Nationwide Bond No. 965002976

Date: \_\_\_\_\_\_ 010710

Name\_ITTmme

G. T. Nimmo, Operations Manager

![](_page_27_Figure_1.jpeg)

# **United States Department of the Interior**

BUREAU OF LAND MANAGEMENT Utah State Office P.O. Box 45155 Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

January 25, 2010

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2010 Plan of Development Clay Basin Unit, Daggett County, Utah and Sweetwater County Wyoming.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following well's location has changed. Please see our memo dated August 14, 2009 for the previous location. The well is planned for calendar year 2010.

(Proposed PZ FRONTIER)

43-009-50001 Clay Basin Unit #69 Sec 20 T03N R24E 1363 FNL 1343 FWL

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

/s/ Michael L. Coulthard

bcc: File - Clay Basin Unit Division of Oil Gas and Mining Central Files Agr. Sec. Chron Fluid Chron

MCoulthard:mc:1-25-10

![](_page_29_Picture_0.jpeg)

Wexpro Company 180 East 100 South P.O. Box 45601 Salt Lake City, UT 84145-0601 Tel 801 324 2600 • Fax 801 324 2637

January 18, 2010

Ms. Diane Mason State of Utah Division of Oil, Gas and Mining 1594 West North Temple, Suite 1210 Salt Lake City, UT 84114-5801

Re: Request for Exception Location: Clay Basin Unit Well #69 SURFACE: 1363' FNL, 1343' FWL, SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>, Sec. 20, T3N, R24E, SLB&M BOTTOM HOLE: SAME Lease No. FEE

Dear Ms. Mason:

In accordance with R649-3-3, Wexpro Company ("Wexpro") respectfully requests administrative approval for an exception location for the Clay Basin Unit Well #69. As reflected on the plats included with the previously-filed Application for Permit to Drill ("APD"), the captioned well is to be drilled from a surface location in the SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> of Section 20 to a proposed bottom hole location of 1363' FNL and 1343' FWL in the SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> of Section 20. All of Section 20 is committed to the Clay Basin Unit which is a Federal Exploratory Unit with Wexpro currently serving as the Unit Operator for the Unit.

Ownership within 460' of the entire length of the proposed wellbore is owned 100% by Wexpro, thereby not requiring the approval of other parties for our intended operation.

We respectfully request the Division of Oil, Gas and Mining approve the APD as described in this letter. Should you have any questions, please call me at 801-324-5938.

Sincerely,

Wexpro Company

By:

Jonathan M. Duke Coordinator: Contracts and Land

cc: Bureau of Land Management Paul Jibson – Wexpro Company Frank Nielsen – Questar Exploration and Production Company

# BOPE REVIEW WEXPRO COMPANY Clay Basin Unit #69 43009500010000

Well Name	WEXPRO COMPANY Clay Basin Unit #69 43009500010000						
String	Surf	Prod					
Casing Size(")	9.625	4.500					
Setting Depth (TVD)	500	5640					
Previous Shoe Setting Depth (TVD)	60	500					
Max Mud Weight (ppg)	8.4	10.0					
BOPE Proposed (psi)	500	3000					
Casing Internal Yield (psi)	3520	12410					
Operators Max Anticipated Pressure (psi)	2442	8.3					

Calculations	Surf String	9.625	"
Max BHP (psi)	.052*Setting Depth*MW=	218	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	158	YES diverter bowl
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	108	YES OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
<b>Pressure At Previous Shoe</b>	Max BHP22*(Setting Depth - Previous Shoe Depth)=	121	NO Reasonable
<b>Required Casing/BOPE Te</b>	est Pressure=	500	psi
*Max Pressure Allowed @	Previous Casing Shoe=	60	psi *Assumes 1psi/ft frac gradient

Calculations	Prod String	4.500	"
Max BPH (psi)	.052*Setting Depth*MW=	2933	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	2256	YES
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	1692	YES OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
<b>Pressure At Previous Shoe</b>	Max BHP22*(Setting Depth - Previous Shoe Depth)=	1802	NO Reasonable
Required Casing/BOPE Test Pressure=			psi
*Max Pressure Allowed @ Previous Casing Shoe=			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
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=		NO
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(Setting Depth - Previous Shoe Depth)=		NO
Required Casing/BOPE Test Pressure=			psi
*Max Pressure Allowed @ Previous Casing Shoe=			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
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=		NO
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(Setting Depth - Previous Shoe Depth)=		NO
Required Casing/BOPE Test Pressure=			psi
*Max Pressure Allowed @ Previous Casing Shoe=			psi *Assumes 1psi/ft frac gradient

'APIWellNo:43009500010000'

![](_page_31_Figure_1.jpeg)

Well	name:			4300	9500010	000 Clav	Basin Uni	t #69		
Oper	rator:	WE		MPANY		eee olay				
Strin	g type:	Surf	ace					Project ID:		
								43-009-50	001	
Loca	tion:	DAC	GETT	COUNTY						
Desig	gn para	mete	ers:		Minimun	n design fa	ctors:	Environm	ent:	
Colla	pse				<u>Collapse</u> :	. J		H2S conside	ered?	No
Mu	id weight	t:		8.400 ppg	Design fa	ctor	1.125	Surface tem	perature:	74 °F
De	sign is d	ased	on evacua	ited pipe.				Temperature	temperature:	81 °F
								Minimum se	ction length:	100 ft
					Burst:					
<b>D</b>					Design fa	ctor	1.00	Cement top	Su	Irface
<u>Burst</u> Ma	y anticin	hete	surface							
IVIC	pressure	eleu -	sunace	440 psi						
Inte	ernal gra	dient		0.120 psi/ft	Tension:			Non-directi	onal string.	
Ca	lculated	BHP		500 psi	8 Round S	STC:	1.80 (J)			
No	backup	mud	specified		8 Rouna L Buttress	10:	1.80 (J) 1.60 (J)			
110	buonup	maa	opeenied.		Premium:		1.50 (J)			
					Body yield	1:	1.60 (B)	Re subsequ	ent strings:	
					Tension is	beend on a		Next settin	g depth:	5,640 ft
					Neutral point: 438 ft		Next mud weight: 10		2.930 ppg	
							100 1	Fracture m	ud wt:	19.250 ppg
								Fracture d	epth:	500 ft
								Injection p	ressure:	500 psi
Run	Segn	nent		Nominal		End	True Vert	Measured	Drift	Est.
Seq	Len	gth	Size	Weight	Grade	Finish	Depth	Depth	Diameter	Cost
	(fi	t)	(in)	(lbs/ft)			(ft)	(ft)	(in)	(\$)
1	50	0	9.625	36.00	J-55	LT&C	500	500	8.796	4088
Run	Colla	pse	Collapse	Collapse	Burst	Burst	Burst	Tension	Tension	Tension
Seq	Loa	ad	Strength	Design	Load	Strength	Design	Load	Strength	Design
	(ps	si)	(psi)	Factor	(psi)	(psi)	Factor	(kips)	(kips)	Factor

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

2020

9.260

500

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

3520

7.04

18

Date: February 8,2010 Salt Lake City, Utah

453

25.17 J

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

Burst strength is not adjusted for tension.

1

218

Well name:		430	09500010000 C	lav Basin Ur	nit #69		
Operator:	WEXPRO C	OMPANY					
String type:	Production				Project ID:		
					43-009-50001		
Location:	DAGGETT	COUNTY					
Design para	ameters:		Minimum desig	n factors:	Environment:		
<u>Collapse</u>			Collapse:		H2S considered?	No	
Mud weigh	nt:	10.000 ppg	Design factor	1.125	Surface temperatu	ıre: 74 °F	
Design is t	based on evacu	lated pipe.			Bottom hole tempe	erature: 153 °F	
					Temperature gradi	ient: 1.40 °F/100ft	
			Burnet		Minimum section l	ength: 1,000 ft	
			<u>Burst:</u> Docign factor	1.00	Comontitoni	Quefece	
Burst			Design lacion	1.00	Cement top:	Sunace	
Max anticia	pated surface						
pressur	e:	1,689 psi					
Internal gra	adient:	0.220 psi/ft	<u>Tension:</u>		Non-directional s	tring.	
Calculated	BHP	2,930 psi	8 Round STC:	1.80 (J)			
			8 Round LTC:	1.80 (J)			
No backup	mud specified		Buttress:	1.60 (J)			
			Premium:	1.50 (J)			
			Boay yiela:	1.60 (B)			
	Tension is based on air weight						
			Neutral point:	4.808 ft			
				.,000 10			

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (Ibs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	5640	4.5	13.50	P-110	LT&C	5640	5640	3.795	31603
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
	2930	10680	3.645	2930	12410	4.24	76.1	338	4.44 J

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

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

Date: February 8,2010 Salt Lake City, Utah

Collapse is based on a vertical depth of 5640 ft, a mud weight of 10 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.

# **ON-SITE PREDRILL EVALUATION** Utah Division of Oil, Gas and Mining

Operator	WEXPRO	COMPA	.NY							
Well Name	Clay Basin	n Unit #69	)							
API Number	43009500	010000		APD No	1855	Field	l/Unit	(	CLAY BASIN	
Location: 1/4,1/4	SENW	<b>Sec</b> 20	Tw 3.0N	<b>Rng</b> 24.0E	1363	FNL	1343	FWL		
GPS Coord (UTM)				Surface Own	ner	Divis	sion of	Wildlife	e Resources	

#### <u>Participants</u>

October 13, 2009 (second on-site meeting)—Chris Kierst (DOGM), Mark Reinbold (DOGM), Paul Jibson (Wexpro), and Alex Hansen (Division of Wildlife Resources).

#### **Regional/Local Setting & Topography**

The Clay Basin Gas field is located at the southern edge of the Green River Basin. The field is currently used by Questar primarily for gas storage in the Dakota Sandstone (lower Cretaceous). The proposed Clay Basin #69 well, which targets the Frontier Formation (upper Cretaceous) for gas production, is near the western end of the existing Clay Basin field. The proposed location is on property owned by the Utah Department of Natural Resources, Division of Wildlife Resources. It is located about 9 miles (as the crow flies) east-northeast of Dutch John, Daggett County, Utah. The initially proposed well site (evaluated on August 26, 2009) was on a low terrace adjacent to floodplain of Red Creek and was judged at the on-site meeting to be unsuitable. Wexpro subsequently submitted a revised site location, which was evaluated at the October 13, 2009, on-site meeting and was judged suitable. Several intermittent streams, including Martin Draw from the west and Clay Basin Creek from the east, drain into Red Creek, which flows across the area from north to south. Red Creek empties into the Green River about six miles south of the site. Clay Basin is formed by a structural anticline with an east-west axis, but it is eroded to form a topographic basin. The basin has relatively gentle slopes, but it is ringed on all sides by more steeply sloping topography. Within the topographic basin, elevations typically range between 6200 and 6800 feet. The location is on the north flank of the Uinta Mountains and appears to be just north of the north flank fault system. Precambrian rocks of the Uinta Mountains are exposed at the surface about two miles or less to the south and southwest

# <u>Surface Use Plan</u>

**Current Surface Use** Grazing Wildlfe Habitat

New Road Miles	Well Pad	Well Pad				
	Width 350	Length 400				

**Src Const Material** Onsite

**Surface Formation** ALLU

Ancillary Facilities N

<u>Waste Management Plan Adequate?</u>

# **Environmental Parameters**

# Affected Floodplains and/or Wetlands N

Revised site location is well above floodplain of Red Creek.

#### Flora / Fauna

Flora include sagebrush, greasewood, halogeton, pepperweed, rabbit brush, prickly pear (pinon and juniper at nearby higher elevations). Fauna include antelope, elk, deer, coyotes, prairie dogs, raptors (no active nests). (Information provided by Alex Hansen of DWR).

Y

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

Sandy, silty, moderate to good permeability.

#### **Erosion Issues** N

#### Sedimentation Issues N

#### Site Stability Issues N

Location is on relatively level ground, well above level of floodplain.

#### **Drainage Diverson Required?** Y

Precipitation will be deflected around location with diversion ditches on south and east sides.

#### Berm Required? Y

During drilling there will be berms around the facilities.

#### Erosion Sedimentation Control Required? N

Paleo Survey Run? N	Paleo Potental Observed? N	Cultural Survey Run?	Cultural Resources? Y
---------------------	----------------------------	----------------------	-----------------------

#### <u>Reserve Pit</u>

Site R	anking	
100 to 200	5	
>1000	0	
>5280	0	
>1320	0	
Mod permeability	10	
Fresh Water	5	
Normal Rock	0	
10 to 20	5	
Present	15	
<b>Final Score</b>	40	1 Sensitivity Level
	Site Ra 100 to 200 >1000 >5280 >1320 Mod permeability Fresh Water Normal Rock 10 to 20 Present Final Score	Site Ranking         100 to 200       5         >1000       0         >5280       0         >1320       0         Mod permeability       10         Fresh Water       5         Normal Rock       0         10 to 20       5         Present       15         Final Score       40

#### **Characteristics / Requirements**

CHARACTERISTICS: Dugout earthen pit. 200' X 150' X 12'(As per APD).

LINER REQUIREMENTS : Minimum requirement is a 12 mil synthetic liner. As per APD, a 16 mil or thicker, nylon-reinforced plastic liner will be used.

#### Closed Loop Mud Required? N Liner Required? Y Liner Thickness 16 Pit Underlayment Required? N

#### **Other Observations / Comments**

PRESITE MEETINGS/PARTICIPANTS:

August 26, 2009 (first on-site meeting)--Chris Kierst(DOGM), Mark Reinbold (DOGM), Paul Jibson (Wexpro), Bill Davey (Wexpro), Kelly Reyos (Questar Gas Management), Troy Gale (Questar Pipeline), Pat Rainbolt (Division of Wildlife Resources), and Alex Hansen (Division of Wildlife Resources). Daggett County was contacted prior to the meeting, but no representative was available to attend the on-site meeting. October 13, 2009 (second on-site meeting)—Chris Kierst (DOGM), Mark Reinbold (DOGM), Paul Jibson (Wexpro), and Alex Hansen (Division of Wildlife Resources).

CURRENT SURFACE USE: Grazing and wildlife habitat.

PROPOSED SURFACE DISTURBANCE: 350' X 400' pad with inboard 200' X 150' X 12' pit. Cut and fill margins will expand the pad area slightly and there will be sufficient room for topsoil and pit material storage along the east and west edges of the location. Approximately 0.3 mile of existing 2-track road will need to be upgraded. This will include 363' on BLM surface in Section 19, 690' on BLM surface in Section 20, and 356' on DWR surface in Section 20. 145' of new road, all on DWR surface, will be constructed in Section 20. The access road will require a 30-foot wide right-of-way (maximum disturbance). One 18" corrugated metal pipe (CMP) is required where the access road enters the location.

LOCATION OF EXISTING WELLS WITHIN A 1 MILE RADIUS: There are 8 active gas storage wells, 4 shut-in gas wells, and 2 abandoned wells within a 1 mile radius of the above proposed well.

LOCATION OF PRODUCTION FACILITIES AND PIPELINES: During drilling there will be berms around the facilities, but after drilling, berms will no longer be needed. There is an existing pipeline just off the location, along the two-track road. It will be necessary to build a feeder pipeline, approximately 126 feet in length, from the Clay Basin #69 well to the existing pipeline. There will be no need to move the existing pipeline.

SOURCE OF CONSTRUCTION MATERIAL: All materials will be derived from cuts at the location and along the access road. Construction material will be located on lease. Gravel will be hauled from Rock Springs, Wyoming.

# ANCILLARY FACILITIES: N/A

WASTE MANAGEMENT PLAN: Portable sewage facilities will be utilized for disposal of human waste. Garbage and other waste material will be placed in a trash cage, the contents of which will be disposed in the nearest legal landfill. Any produced liquids will be contained in test tanks and hauled out by tank trucks. Cuttings and drilling fluids will be placed in a lined mud pit, which will be constructed with at least one half of its holding capacity below ground level.

AFFECTED FLOODPLAINS AND/OR WETLANDS: The initially proposed well location was near the edge of a low terrace, adjacent to the modern floodplain of Red Creek. The location was only 20-25 feet above the normal creek level and was about 350 feet horizontally from the creek (as determined from a recent aerial photograph). Both state agency and company participants expressed concern that the location might be on unstable ground and that it would likely be undermined by flash flooding. Troy Gale (Questar Pipeline) indicated that he had seen Red Creek in flood stage in 1987, essentially filling the entire width of the present day floodplain. That would place floodwater very close to the originally proposed well location. Based on this consensus opinion, Wexpro proposed a revised location, which was reviewed at the October 13 on-site meeting. The new location is located 1250 northwest of the initial location and is on an older, higher alluvial terrace, farther from the modern floodplain. This location is about 1050 feet west of the present creek channel (as determined from the aerial photograph) and is at an elevation of 6308 feet, which is about 80 feet higher than the creek at its nearest point. The new location should have a more stable surface and will help to maintain the quality of groundwater and minimize damage to wildlife habitat.

SURFACE FORMATION & CHARACTERISTICS: State agency mapping indicates that the currently staked well location is situated on a terrace of older alluvium called the Younger North Flank Piedmont Alluvium. (Higher alluvial terraces are still older). It consists of unconsolidated to poorly consolidated, poorly sorted sand, gravel, cobbles, and boulders. The soil profile is poorly-developed to well-developed. There are caliche coatings on clasts in the upper few feet. Total thickness is less than 30 feet. The alluvium is underlain by the Baxter Shale of upper Cretaceous age. The Baxter is exposed on the slope between the upper Piedmont Alluvium and the modern floodplain alluvium. The Baxter Shale consists of gray, soft, slope-forming calcareous shale containing numerous beds of fine-grained, ripple-marked sandstone and minor limestone.

EROSION/SEDIMENTATION/STABILITY: The revised location is on relatively level ground and should pose no erosional stability problems

PALEONTOLOGICAL POTENTIAL: None observed

RESERVE PIT CHARACTERISTICS: Dugout earthen pit. 200' X 150' X 12'(As per APD) LINER REQUIREMENTS (Site Ranking Form attached): Minimum requirement is a 12 mil synthetic liner. As per APD, a 16 mil or thicker, nylon-reinforced plastic liner will be used.

SURFACE RESTORATION/RECLAMATION PLAN: As per surface use agreement.

SURFACE AGREEMENT: In APD.

CULTURAL RESOURCES/ARCHAEOLOGY: The revised location has been cleared by the archaeological study. An archaeological site is located south of the proposed well location.

OTHER OBSERVATIONS/COMMENTS: The Division of Wildlife Resources has stated tha drilling should not take place between December 1 and April 15, in order to avoid interfering with winter wildlife habitat, especially the crucial winter range for deer and elk. The access road will enter the pad near the southwest corner at about the zero cut and fill point. An 18" culvert will be placed where the access road enters the location. Water will be hauled by tank trucks from Rock Springs, WY, Dutch John, UT, or from Red Creek (Temporary Application Number 41-3640, T78128). Water may also come from additional locations as per approval from Daggett County. The operator (Wexpro/Questar) has a statewide surety blanket bond with Liberty Mutual (965-003-0333) in place for plugging in the amount of \$120,000.

ATTACHMENTS: 4 photos of this location were taken and will be placed on file.

Reinbold Mark2/22/2010EvaluatorDate / Time

# **Application for Permit to Drill Statement of Basis**

2/25/2010

# Utah Division of Oil, Gas and Mining

Page 1

APD No	API WellNo	Status	Well Type	Surf Owner	СВМ
1855	43009500010000	LOCKED	GW	Р	No
Operator	WEXPRO COMPANY		Surface Owner-APD	Division of Wildlif	e Resources
Well Name	Clay Basin Unit #69		Unit	CLAY BASIN	
Field	CLAY BASIN		Type of Work	GW	
Location	SENW 20 3N 24E	S 1363 FNL	1343 FWL GPS Coord (	UTM) 648436E	4538551N
Geologic State	ement of Basis				

#### Jeologic Statement of Dasis

Significant volumes of high quality ground water are unlikely to be encountered at this location. A moderately permeable to permeable soil may be developed on the Younger North Flank Piedmont Alluvium (Oan2) if there is sufficient sand or coarser sediment from reworked Mesaverde Group rocks, but if reworked mud from the Baxter Shale is predominant, the soil is likely to have low permeability. In the normal stratigraphic sequence in this area, the Mesaverde Group (upper Cretaceous) conformably overlies the Baxter Shale. In the immediate vicinity of the proposed well, the Qan2 lies unconformably on the upper Cretaceous Baxter Shale, which is the surface bedrock unit in the immediate area. The Baxter Shale (or the Mancos Shale, as shown by Wexpro in the APD) extends from the surface (beneath the Qan2) to the top of the Frontier Formation at an estimated depth of 5375 feet. The Baxter Shale consists of gray, soft, slope-forming calcareous shale with numerous beds of fine-grained, ripple-marked sandstone and minor limestone.

The Division of Water Rights indicates no underground water rights filed within a one mile radius of the proposed well site. Seven surface water rights (including point to point) for stockwatering purposes are filed for Red Creek and tributaries by the Division of Wildlife Resources. The proposed drilling, casing and cementing program should adequately isolate any shallow zones of fresh water that may be penetrated. The nearest known springs (as shown on USGS topographic maps) are in the area of Richards Gap (in Wyoming), approximately  $1\frac{1}{2}$  miles north-northeast of the proposed well location. The springs issue from sandstones in the Mesaverde Group and are located east of the road which runs along the east side of Red Creek. The strata in that area dip toward the north at about 20 degrees.

Wexpro plans to extend surface casing in the well to a depth of 500 feet, within the Baxter Shale. This should adequately protect zones of fresh water from contamination.

APD Evaluator	Date / Time
Reinbold Mark	2/18/2010

#### **Surface Statement of Basis**

The proposed location is on property owned by the Department of Natural Resources, Division of Wildlife Resources. The surface immediately surrounding this location drains south via Red Creek to the Green River. Precipitation will be deflected around the location with diversion ditches on the south and east sides, berms, and culverts. There will be a fence around the reserve pit. The site was photographed and characterized during the on-site review. Provision was made to ensure site rehabilitation, litter and waste control, preservation of drainage patterns and the integrity of local infrastructure, groundwater and other resources. The well utilities and gas gathering system will follow the approach roadway.

> Reinbold Mark **Onsite Evaluator**

2/22/2010 Date / Time

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

2/25/2010

# Application for Permit to Drill Statement of Basis

Utah Division of Oil, Gas and Mining

Page 2

Pits	A synthetic liner with a minimum thickness of 12 mils shall be properly installed and maintained in the reserve pit.
Surface	The well site shall be bermed to prevent fluids from leaving the pad.
Surface	Drainages adjacent to the proposed pad shall be diverted around the location.

# WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED:	8/7/2009	API NO. ASSIGNED:	43009500010000			
WELL NAME:	Clay Basin Unit #69					
OPERATOR:	WEXPRO COMPANY (N1070)	PHONE NUMBER:	307 922-5647			
CONTACT:	Paul Jibson					
PROPOSED LOCATION:	SENW 20 030N 240E	Permit Tech Review:				
SURFACE:	1363 FNL 1343 FWL	Engineering Review:				
BOTTOM:	1363 FNL 1343 FWL	Geology Review:				
COUNTY:	DAGGETT					
LATITUDE:	40.98655	LONGITUDE:	-109.23548			
UTM SURF EASTINGS:	648436.00	NORTHINGS:	4538551.00			
FIELD NAME:	CLAY BASIN					
LEASE TYPE:	4 - Fee					
LEASE NUMBER:	FEE PROPOSED PRO	DDUCING FORMATION(S): FRONTIER				
SURFACE OWNER:	4 - Fee	COALBED METHANE:	NO			
RECEIVED AND/OR REVIEWED:		LOCATION AND SITING:				
PLAT		🔲 R649-2-3.				
<b>Bond:</b> STATE/FEE - 96500303	33	Unit: CLAY BASIN				
Potash		R649-3-2. General				
Oil Shale 190-5						
Oil Shale 190-3		R649-3-3. Exception				
Oil Shale 190-13		✓ Drilling Unit				
✓ Water Permit: Daggett Coun	ity	Board Cause No: R649-3-3				
RDCC Review:		Effective Date:				
Fee Surface Agreement		Siting:				
Intent to Commingle		R649-3-11. Directional Drill				
Commingling Approved						

Comments: Presite Completed

E.

Stipulations:5 - Statement of Basis - bhill<br/>23 - Spacing - dmason

![](_page_41_Picture_1.jpeg)

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: Clay Basin Unit #69 API Well Number: 43009500010000 Lease Number: FEE Surface Owner: FEE (PRIVATE) Approval Date: 2/25/2010

# Issued to:

WEXPRO COMPANY, P.O. Box 458, Rock Springs, WY 82902

#### 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 R649-3-3. The expected producing formation or pool is the FRONTIER 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.

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

# **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 https://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:** 

Xil Hut

Gil Hunt Associate Director, Oil & Gas

	STATE OF UTAH		FORM 9			
	5.LEASE DESIGNATION AND SERIAL NUMBER: FEE					
SUNDI	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:					
Do not use this form for propo bottom-hole depth, reenter plu DRILL form for such proposals	7.UNIT or CA AGREEMENT NAME: CLAY BASIN					
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: CLAY BASIN UNIT #69					
2. NAME OF OPERATOR: WEXPRO COMPANY	9. API NUMBER: 43009500010000					
3. ADDRESS OF OPERATOR: P.O. Box 458 , Rock Springs,	9. FIELD and POOL or WILDCAT: CLAY BASIN					
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1363 FNL 1343 FWL		COUNTY: DAGGETT				
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: SENW Section: 20	STATE: UTAH					
11. CHE	CK APPROPRIATE BOXES TO INDICA	ATE NATURE OF NOTICE, REPORT,	OR OTHER DATA			
TYPE OF SUBMISSION		TYPE OF ACTION				
		ALTER CASING	CASING REPAIR			
Approximate date work will start: 2/24/2011	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME			
Date of Work Completion:	OPERATOR CHANGE	Plug and abandon				
	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			
			WATER DISPOSAL			
DRILLING REPORT		□ SI TA STATUS EXTENSION	✓ APD EXTENSION			
Report Date:	□ WILDCAT WELL DETERMINATION	□ OTHER	OTHER:			
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.         The Clay Basin Unit No. 69 APD was originally approved on 2/25/2010 for a period of one year. At this time, Wexpro Company requests a APD extension for an additional one year.       Approved by the Utah Division of Oil, Gas and Mining         Date:       02/17/2011         By:       By:						
NAME (PLEASE PRINT) Paul Jibson	PHONE NUMBE 307 352-7561	R TITLE Permit Agent				
SIGNATURE N/A		<b>DATE</b> 2/16/2011				

![](_page_44_Picture_0.jpeg)

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 43009500010000**

API: 43009500010000
Well Name: CLAY BASIN UNIT #69
Location: 1363 FNL 1343 FWL QTR SENW SEC 20 TWNP 030N RNG 240E MER S
Company Permit Issued to: WEXPRO COMPANY
Date Original Permit Issued: 2/25/2010

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.

- 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? O Yes I 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? Q Yes 🖲 No

• Is bonding still in place, which covers this proposed well? 🔘 Yes 🔵 No

Signature:Paul JibsonDate:2/16/2011Title:Permit Agent Representing:WEXPRO COMPANY

RECEIVED Feb. 16, 2011

![](_page_45_Picture_0.jpeg)

# State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER Executive Director

Governor GREG BELL Lieutenant Governor Division of Oil, Gas and Mining JOHN R. BAZA Division Director

June 14, 2012

Wexpro Company P.O. Box 458 Rock Springs, WY 82902

Re: <u>APD Rescinded – Clay Basin U 69, Sec. 20 T.3N, R.24E,</u> <u>Daggett County, Utah API No. 43-009-50001</u>

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 February 25, 2010. On February 17, 2011 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 June 14, 2012.

A new APD must be filed with this office for approval <u>prior</u> 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,

ranc Ht les m

Diana Mason Environmental Scientist

cc: Well File Brad Hill, Technical Service Manager

![](_page_45_Picture_17.jpeg)

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