

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

FORM 3

AMENDED REPORT   
(highlight changes)

<b>APPLICATION FOR PERMIT TO DRILL</b>				5. MINERAL LEASE NO: ML-22161	6. SURFACE: Federal
1A. TYPE OF WORK: DRILL <input checked="" type="checkbox"/> REENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/>				7. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A	
B. TYPE OF WELL: OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> OTHER _____ SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input checked="" type="checkbox"/>				8. UNIT or CA AGREEMENT NAME: N/A	
2. NAME OF OPERATOR: Thurston Energy Operating Company				9. WELL NAME and NUMBER: Thurston 12-29-9-24	
3. ADDRESS OF OPERATOR: 4925 Greenville # 900 CITY Dallas STATE TX ZIP 75206			PHONE NUMBER: (323) 251-8819	10. FIELD AND POOL, OR WILDCAT: Undesignated <i>Davis Deepground</i>	
4. LOCATION OF WELL (FOOTAGES) AT SURFACE: 1,973' FSL & 656' FWL NWSW AT PROPOSED PRODUCING ZONE: Same as above				11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWSW 29 9S 24E	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: 45.3 miles south of Vernal, UT				12. COUNTY: Uintah	13. STATE: UTAH
15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET) 656'		16. NUMBER OF ACRES IN LEASE: 320		17. NUMBER OF ACRES ASSIGNED TO THIS WELL: 40	
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET) 2,700'		19. PROPOSED DEPTH: 8,000		20. BOND DESCRIPTION: 0269435251	
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): 5,409' GR		22. APPROXIMATE DATE WORK WILL START: 6/1/2010		23. ESTIMATED DURATION: 30 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
12 1/4" <i>11"</i>	8 5/8 J-55 36#	2,000	Premium Lite II 250 SX 3.38 CF 11.0 PPG Class "G" 329 SX 1.2 CF 15.6 PPG Calcium Chloride 200 SX 1.10 CF 15.6 PPG
7 7/8	4 1/2 N-80 11.6#	8,000	Premium Lite II 200 SX 3.3 CF <i>14.3 PPG</i> Class G 400 SX 1.56 CF <i>14.3 PPG</i>

25. **ATTACHMENTS**

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

<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER	<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN
<input checked="" type="checkbox"/> EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER	<input type="checkbox"/> FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER

NAME (PLEASE PRINT) William A Ryan (435) 789-0968 TITLE Agent

SIGNATURE *William A Ryan* DATE 2/24/2010

(This space for State use only)

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

**RECEIVED**  
**MAR 15 2010**  
DIV. OF OIL, GAS & MINING

API NUMBER ASSIGNED: 43-047-40628

APPROVAL:  
Date: 02-16-10  
(See Instructions on Reverse Side)  
By: *[Signature]*



# Thurston Energy, LLC

4925 Greenville Avenue, Suite 900 • Dallas, Texas 75206 USA (323) 251-8819

February 24, 2010

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

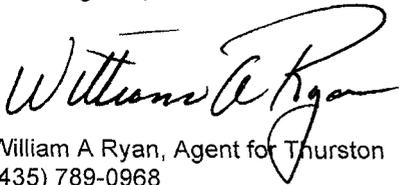
To Whom It May Concern:

This APD filing for state well name **Thurston 12-29-9-24**, located in ML-22161, and all filing information is identical to a previously approved permit with the same well location, name, etc., that has since expired. The previously approved API Well number is 43-047-38155.

Thurston is essentially "re-filing" for a new permit and API #. Please let me know if there is anything else you may need from me in this regard.

**Please hold all information associated with this Application for Permit to Drill and all associated logs confidential for a minimum of six (6) months.**

Best Regards,



William A Ryan, Agent for Thurston  
(435) 789-0968

RECEIVED  
MAR 15 2010  
DIV. OF OIL, GAS & MINING

# Thurston Energy, LLC

4925 Greenville Avenue, Suite 900 • Dallas, Texas 75206 USA

## 10 Point Plan

Thurston Energy Operating Company

Thurston 12-29-9-24

Surface Location NW ¼ SW ¼, Section 29, T.9S, R.24E

### 1. Surface Formation

Green River

### 2. Estimated Formation Tops and Datum:

Formation	Depth	Datum
Green River	Surface	+5,409' G.L.
Uteland Butte Limestone	3,545'	+1,864'
Wasatch	3,635'	+1,774'
Mesaverde	5,385'	+24'
Buck Tongue	6,810'	-1,401'
Castlegate	6,880'	-1,471'
TD	8,000'	-2,591'

A 12 ¼" will be drilled to 2,000' +/- . The hole will depend on the depth that the Birds Nest Zone is encountered. The hole will be drilled 400' beyond the top of the Birds Nest.

### 3. Producing Formation Depth:

Formation objective includes the Green River, Wasatch, Mesaverde and its sub-members.

Off Set Well information:

Producing Wells: Southman Cyn 9-24-31-30 and Dirty Devil Unit 11-29

Abandoned Wells: Devils Playground 32-31

**4. Proposed Casing:**

Hole Size	Casing Size	Weight/FT	Grade	Coupling & Tread	Casing Depth	New/Used
11	8 5/8	36#	J-55	STC	2000	New
7 7/8	4 1/2	11.6#	N-80	LTC	TD	New

**Cement Program:**

The surface casing will be cemented to the surface as follows:

	Casing Size	Cement Type	Cement Amounts	Cement Yield	Cement Weight
Lead:	8 5/8	Premium Lite II, .05#/sk Static Free, .25#/sk Cello Flake, 5#/sk KOL Seal, .002 gps FP-6L, 10% Bentonite, .5% Na <sub>2</sub> SiO <sub>3</sub> , 3% KCL	250 sks. +/-	3.38 ft <sup>3</sup> /sk	11.0 ppg
Tail:	8 5/8	Class "G", 2% CaCl <sub>2</sub> , .25#/sk Cello Flake	329 sks. +/-	1.2 ft <sup>3</sup> /sk	15.6 ppg
Top Job:	8 5/8	4% CaCL <sub>2</sub> , .25#/sk Cello Flake	200 sks. +/-	1.10 ft <sup>3</sup> /sk	15.6 ppg

Production casing will be cemented to 2,500' or higher as follows:

	Casing Size	Cement Type	Cement Amounts	Cement Yield	Cement Weight
Lead:	4 1/2	Premium Lite II, .25#/sk Cello Flake, .05#/sk Static Free, 5#/sk Kol Seal, 3% KCL, .055 gps FP-6L, 10% Bentonite, .5 Na <sub>2</sub> SiO <sub>3</sub>	200 sks +/-	3.3 ft <sup>3</sup> /sk	11.0 ppg
Tail:	4 1/2	Class "G", .05% Static Free, 2 NaCl, .1% R-3, 2% Bentonite	400 sks +/-	1.56 ft <sup>3</sup> /sk	14.3 ppg

**5. BOP and Pressure Containment Data:**

The anticipated bottom hole pressure will be less than 3000 psi.

A 3000 psi WP BOP system as described in the BOP and Pressure Containment Data (attached) will be installed and maintained from the 8 5/8 surface casing. The BOP system including the casing will be pressure tested to minimum standards set forth in "On Shore Order #2". The BOP will be mechanically checked daily during the drilling operation.

**6. Mud Program:**

Interval	Mud Weight lbs/gal	Viscosity Sec/OT	Fluid Loss MI/30 min	Mud Type
0-2000	Air/Clear Water	-----	No Control	Water/Gel
2000-TD	8.4-12.0	30	8-10	Water/Gel

**7. Auxiliary Equipment**

Upper Kelly cock, full opening stabbing valve, 2 ½" choke manifold and pit level indicator.

**8. Testing Coring, Sampling and Logging:**

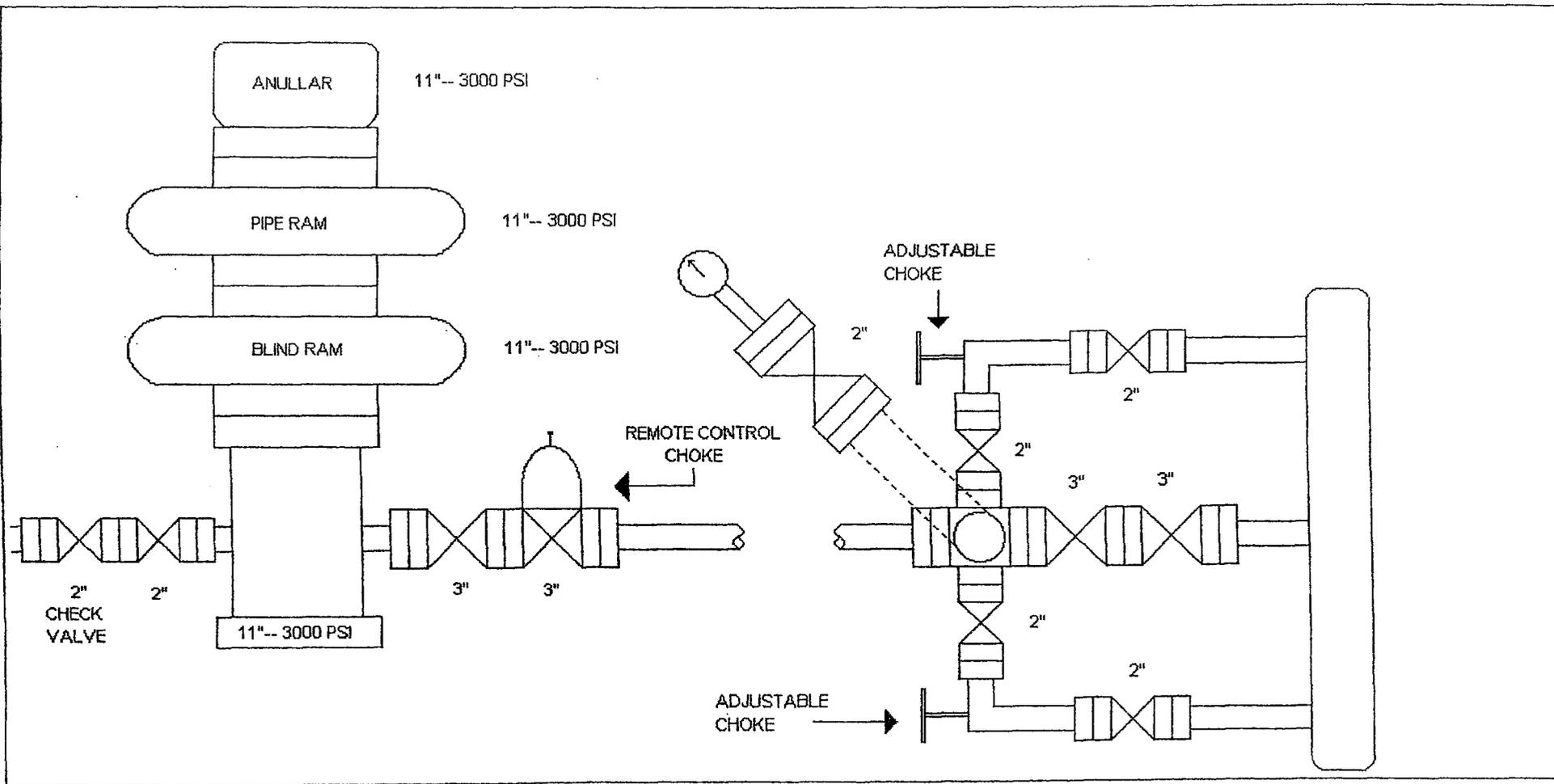
- a) Test: None are anticipated
- b) Coring: There is the possibility of sidewall coring
- c) Sampling: Every 10' from 2000' to TD
- d) Logging: Type: DLL/SFL W/GR and SP @ Interval: TD to Surf Csg; Type: FDC/CNL W/GR and CAL @ Interval: TD to Surf Csg.

**9. Abnormalities (including sour gas):**

No abnormal pressures, temperatures or other hazards are anticipated. Oil and gas shows are anticipated in the Wasatch formation. Other wells drilled in the area have not encountered over pressured zones or H2S.

**10. Drilling Schedule:**

The anticipated starting date is 6/1/10. Duration of operations is expected to be 30 days.



# **Thurston Energy, LLC**

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4925 Greenville Avenue, Suite 900 • Dallas, Texas 75206 USA

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**13 POINT SURFACE USE PLAN FOR THURSTON 12-29-9-24  
LOCATED IN NW ¼ SW ¼, SECTION 29, T.9S, R24E, S.L.B.&M  
UINTAH COUNTY, UTAH  
LEASE NUMBER: ML-22161  
SURFACE OWNERSHIP: FEDERAL**

**1. Existing Roads:**

Thurston Energy Operating Company, Thurston 12-29-9-24, Section 29, T9S, R24E, starting in Vernal, Utah: Proceed in an easterly, then southerly direction from Vernal, Utah along US Highway 40 approximately 3.3 miles to the junction of State Highway 45; exit right and proceed in a southerly direction along State Highway 45 approximately 36 miles to the junction of County B Road 3410 (this road is located approximately 0.5 miles south of Bonanza, UT). Exit right and proceed in a westerly direction along County B Road 3410 approximately 4.2 miles to the junction of County B road 3420. Exit left and proceed in a southerly direction along County B Road 3425. Exit left and proceed in a southerly direction along County B Road 3425 approximately 0.3 miles to the proposed access road. Follow road flags in a southeasterly direction approximately 370 feet to the proposed location.

Total Distance from Vernal, Utah to the proposed well location is approximately 45.3 miles.

All existing roads to the proposed location are State of Utah, BLM maintained or County Class D roads. Please see the attached map for additional details.

**2. Planned access road:**

The proposed access road will be approximately 370' +/- of new construction on lease. The road will be graded once per year minimum and maintained.

A) Approximate Length	370'
B) Right-of-Way width	30'
C) Running surface	18'
D) Surface material	Native Soil
E) Maximum grade	8%
F) Fence crossing	None
G) Culvert	None
H) Turnouts	None
I) Major cuts and fills	None
J) Road Flagged	Yes
K) Access road surface ownership	Federal
L) All new construction on lease	Yes
M) Pipeline crossing	No

Please see the attached location plat for additional details.

An off lease Right-of-Way will not be required.

All surface disturbances for the road and location will be within the lease boundary.

**3. Location of existing wells:**

The following wells are located within a one-mile radius of the location site.

A) Producing well	Southman Cyn 9-24-31-30 and Dirty Devil Unit 11-29
B) Water well	None
C) Abandoned well	Devils Playground 31-31
D) Temp abandoned well	None
E) Disposal well	None
F) Drilling/Permitted well	None
G) Shut In well	None
H) Injection well	None
I) Monitoring or observation well	None

Please see attached map for additional details.

**4. Location of tank batteries, production facilities and production gathering service lines:**

All production facilities are to be contained within the proposed location site. Please see the attached plat for a typical gas well separator installation and well site piping.

All permanent (on site for more than six months or longer) structures constructed or installed will be painted a Carlsbad Canyon color. Facilities required to comply with O.S.H.A. (Occupational Safety and Health Act) will be excluded. The required paint color is Carlsbad Canyon.

All tanks will be surrounded by a dike of sufficient capacity to contain the storage capacity of the largest tank in the battery. The integrity of the dike will be maintained.

The operator will adhere to all site security guidelines and regulation identified in 43 CFR 3126.7.

All off lease storage, off lease measurement, commingling on lease or off lease, of production, will have prior written approval from the authorized officer.

If the well is capable of economic production a surface gas line will be required.

**Approximately 3,200' +/- of 3" surface pipeline would be constructed on Federal lands. The pipeline will tie into the existing pipeline in Sec 29, T9S, R24E. The pipeline will be strung and boomed to the north of the location and parallel to the access roads. A temporary width of 30' will be required for approximately one week during construction. A permanent width of 15' will be required for the life of the well. The pipeline will be buried at water crossings and at the tap. A water diversion permit has been filed with DWQ.**

**An off lease Right-of-Way will not be required.**

Please see the attached location diagrams for pipeline location. There will be no additional surface disturbances required for the installation of a gathering line.

The gas meter run will be located within 500' of the wellhead. The gas line will be buried or anchored down from the wellhead to the meter. Meter runs will be housed and/or fenced.

The gas meter will be calibrated and the tank strapped in place prior to any deliveries. Tests for meter accuracy will be conducted monthly for the first three months on new meter installations and at least quarterly thereafter. The authorized officer will be provided with a date and time for the initial meter calibration and all future meter-proving schedules. A copy of the meter calibration report will be submitted to the BLM's Vernal District office and State of Utah, Division of Oil, Gas, and Mining. All measurement facilities will conform to API (American Petroleum Institute) and AGA (American Gas Association) standards for gas and liquid hydrocarbon measurement.

**5. Location and type of water supply:**

Water for drilling and cementing will come from the White River at the Bonanza Bridge, Permit # - T75376.

**6. Source of construction materials:**

All construction material for this location site and access road shall be borrow material accumulated during construction of the location site and access road. Additional road gravel or pit lining material will be obtained from private resources.

**7. Methods for handling waste disposal:**

A) Pit construction and liners:

The reserve pit will be approximately **12 ft** deep and most of the depth shall be below the surface of the existing ground. Please see the attached plat for details.

The reserve pit will be lined.

The reserve pit will be used to store water for drilling. A semi-closed system will be used to drill the well. All fresh water for drilling will come from a frac tank placed on location and from the rig tank. The pit will be used to hold non-flammable materials such as cuttings, salt, drilling fluids, chemicals, produced fluids, etc.

B) Produced fluids:

Produced water will be confined to the reserve pit, or if deemed necessary, a storage tank for a period not to exceed 90 days after initial production. During the 90-day period an application for approval for permanent disposal method and location will be submitted to the authorized officer.

C) Garbage:

A trash cage fabricated from expanded metal will be used to hold trash on location and will be removed to an authorized landfill location.

D) Sewage:

A portable chemical toilet will be supplied for human waste.

E) Site clean-up:

After the rig is moved off the location the well site area will be cleaned and all refuse removed.

**8. Ancillary facilities:**

There are no ancillary facilities planned at this time nor foreseeable in the future.

**9. Well-site layout:**

Location dimensions are as follows:

A) Pad length	345 ft
B) Pad width	260 ft
C) Pit depth	12 ft
D) Pit Length	150 ft
E) Pit width	75 ft
F) Max cut	18.3 ft
G) Max fill	10.4 ft

H) Total cut yds	7,670 cu yds
I) Pit location	South end
J) Top soil location	East and West ends
K) Access road location	West end
L) Flare Pit	Corner C

Please see the attached location diagram for additional details.

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

- A) Thirty-nine inch new wire shall be used with at least one strand of wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.
- B) The net wire shall be no more than 2 inches above the net wire. Total height of the fence shall be at least 42 inches.
- C) Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.
- D) Standard steel, wood or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than 16 ft.
- E) All wire shall be stretched by using a stretching device before it is attached to the corner posts.

**10. Plans for restoration of the surface:**

Prior to construction of the location, the top 6 inches of soil material will be stripped off the location and the pit area. The topsoil removed and piled will amount to approximately **1,500** cubic yards of material.

Topsoil will be stockpiled in one distinct pile. Placement of the topsoil is noted on the attached location plat. The topsoil pile from the location will be seeded as soon as the soil is stock piled with the seed mix listed. **The topsoil will be used in the interim reclamation.** When all drilling and completion activities have been completed and the pit back-filled the topsoil from the pit area will be spread on the pit area. The pit area will be seeded when the soil has been spread. The unused portion of the location (the area outside the dead men) will be re-contoured.

The dirt contractor will be provided with an approved copy of the surface use plan prior to construction activities.

Changes to the drainage during the construction activities shall be restored to its original line of flow or as near as possible when the pit is back-filled.

All disturbed areas will be re-contoured to the approximate natural contours. Prior to back filling, the pit the fences around the reserve pit will be removed.

The reserve pit will be reclaimed within 90 days of well completion. If the reserve pit has not dried sufficiently to allow back filling, an extension on the time requirement for back filling the pit will be requested. Once reclamation activities have begun, they shall be completed within 30 days.

After the reserve pit has been reclaimed, no depressions in the soil covering the reserve pit will be allowed. The objective is to keep seasonal rainfall and run off from seeping

into the soil used to cover the reserve pit. Diversion ditches and water bars will be used to divert the run off as needed.

When restoration activities have been completed, the location site and new access road cuts and shoulders shall be reseeded. Prior to reseeding, all disturbed areas will be scarified and left with a rough surface.

A) Seeding dates:

Seed will be spread when topsoil is stock piled and when reclamation work is performed.

The seed mix and quantity list will be used whether the seed is broadcast or drilled.

B) Interim Seed Mix:

4#/acre Needle & Thread Grass; 4#/acre Crested Wheat Grass, 4#/acre Indian Rice Grass

**11. Surface ownership:**

Access road, Location, Pipeline - All Federal

**12. Other information:**

A) Vegetation:

The vegetation coverage is "Slight". The majority of the existing vegetation consists of Sagebrush. Rabbit brush, Bitter Brush, and Indian Rice grass are also found on the location.

B) Dwellings:

There are no dwelling or other facilities within a one-mile radius of the location.

C) Archeology:

The location has been surveyed. See copy of survey.

If, during operations, any archaeological or historical sites, or any objects of antiquity (subject to the antiquities act of June 8, 1906) are discovered, all operations, which would affect such sites, will be suspended and the discovery reported promptly to the surface management agency.

D) Water:

The nearest water is the White River located approximately 3.2 miles to the South.

E) Chemicals:

No pesticides, herbicides or other possible hazardous chemicals will be used without prior application.

F) Notification:

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

G) Flare pit:

The flare pit will be located in corner C of the reserve pit outside the pit fences and 100 feet from the bore hole on the east side of the location. All fluids will be removed from the pit within 48 hours of occurrence.

**13. Lessees or Operator's representative and certification:**

A) Representative

William A Ryan  
Rocky Mountain Consulting  
730 East 300 South  
Vernal, UT 84078

Office: (435) 789-0968  
Fax: (435) 789-0970  
Mobile: (435) 828-0969

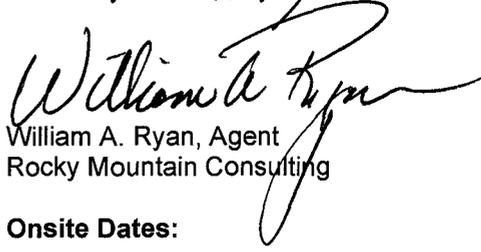
All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, onshore oil and gas orders, and any applicable notices to lessees. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

This drilling permit will be valid for a period of one year from the date of approval. After permit termination, a new application will be filed for approval for any future operations.

B) 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 presently exist, that the statements made in this plan are, to the best of my knowledge and belief, true and correct, and that the work associated with the operation proposed herein will be performed by Thurston Energy Operating Company and its contractors and subcontractors in conformity with this plan and terms and conditions with this plan and the terms and conditions under which it is approved.

Date: March 10, 2010



William A. Ryan, Agent  
Rocky Mountain Consulting

**Onsite Dates:**

# **Thurston Energy, LLC**

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4925 Greenville Avenue, Suite 900 • Dallas, Texas 75206 USA

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## **Statement of Use of Hazardous Materials**

No chemical(s) from the EPA's consolidated list of Chemicals Subject to Reporting under Title III of the Superfund Amendments and Reauthorization, Act (SARA) of 1986 will be used, produced, transported, stored, disposed, or associated with the proposed action. No extremely hazardous substances, as defined in 40 CFR 355, will be used, produced, stored, disposed, or associated with the proposed action.

If you require addition information please contact:

William A Ryan  
Rocky Mountain Consulting  
730 East 300 South  
Vernal, UT 84078

Office: (435) 789-0968  
Fax: (435) 789-0970  
Mobile: (435) 828-0969

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

FORM 4B

Bond No. 0269435251

**COLLATERAL BOND**

**KNOW ALL MEN BY THESE PRESENTS:**

That we (operator name) Thurston Energy Operating Company as Principal, which is duly authorized and qualified to do business in the State of Utah, are held and firmly bound unto the State of Utah in the sum of:

Thirty Thousand and NO/100 dollars (\$ \$30,000.00 )

lawful money of the United States by virtue of the following financial instruments (cash account, negotiable bonds of the United States, a state or municipality, or negotiable certificate of deposit - see Rule R649-3-1):

Certificate of Deposit Bond # 0269435251

payable to the Director of the Division of Oil, Gas and Mining, as agent of the State of Utah, for the use and benefit of the State of Utah for the faithful payment of which we bind ourselves, our heirs, executors, administrators and successors, jointly and severally by these presents.

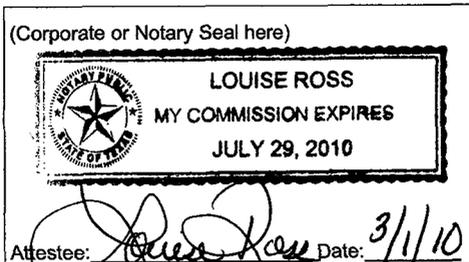
**THE CONDITION OF THIS OBLIGATION IS SUCH THAT, WHEREAS** the Principal is or will be engaged in the drilling, redrilling, deepening, repairing, operating, and plugging and abandonment of a well or wells and restoring the well site or sites in the State of Utah for the purposes of oil or gas production and/or the injection and disposal of fluids in connection therewith for the following described land or well:

- Blanket Bond: To cover all wells drilled in the State of Utah
- Individual Bond: Well No: Thurston 12-29-9-24  
Section: 29 Township: 9S Range: 24E  
County: Uintah, Utah

**NOW, THEREFORE**, if the above bounden Principal shall comply with all the provisions of the laws of the State of Utah and the rules, orders and requirements of the Board of Oil, Gas and Mining of the State of Utah, including, but not limited to the proper plugging and abandonment of wells and well site restoration, then this obligation is void; otherwise, the same shall be and remain in full force and effect.

**IN TESTIMONY WHEREOF**, said Principal has hereunto subscribed its name and has caused this instrument to be signed by its duly authorized officers and its corporate or notary seal to be affixed this

1st day of March, 20 10.



Thurston Energy Operating Company

By Ralph Curton, Jr. Principal (company name)  
Name (print) Ralph Curton, Jr. Title President/CEO

[Signature]  
Signature

WELL COPY

**A CULTURAL RESOURCE INVENTORY FOR THE THURSTON ENERGY  
OPERATING COMPANY WELLS #9-7-9-24, #7-9-9-24, #5-15-9-24, #10-15-9-24, #13-19-9-24,  
#8-20-9-24, #13-20-9-24, #5-27-9-24, #15-27-9-24, #12-29-9-24 and #13-29-9-24, AND THEIR  
ASSOCIATED ACCESS ROADS AND PIPELINES, UINTAH COUNTY, UTAH**

by

Sandy Chynoweth Pagano  
Archaeologist

Prepared for:

Rocky Mountain Consulting, Inc.  
290 South 800 East  
Vernal, Utah 84078

Prepared by:

Sagebrush Consultants, L.L.C.  
3670 Quincy Avenue, Suite 203  
Ogden, Utah 84403

Under the Authority of:

Cultural Resource Use Permit No. 05UT54630

and

Utah State Antiquities Permit No. U-05-SJ-1411bps

Cultural Resource Report No. 1479

April 20, 2006

## **Paleontological Reconnaissance Report**

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**Thurston Energy's Proposed Well Pads, Access Roads, and  
Pipelines for "Thurston #9-7-9-24; #7-9-9-24; #5-15-9-24;  
#10-15-9-24; #13-19-9-24; #8-20-9-24; #13-20-9-24;  
#5-27-9-24; #15-27-9-24; & #12-29-9-24"  
(Sec. 7, 9-10, 15, 19-20, 27, & 29, T 9 S, R 24 E)**

Bonanza & Red Wash SE  
Topographic Quadrangles  
Uintah County, Utah

May 19, 2006

Prepared by Stephen D. Sandau  
Paleontologist  
Intermountain Paleo-Consulting  
P. O. Box 1125  
Vernal, Utah 84078

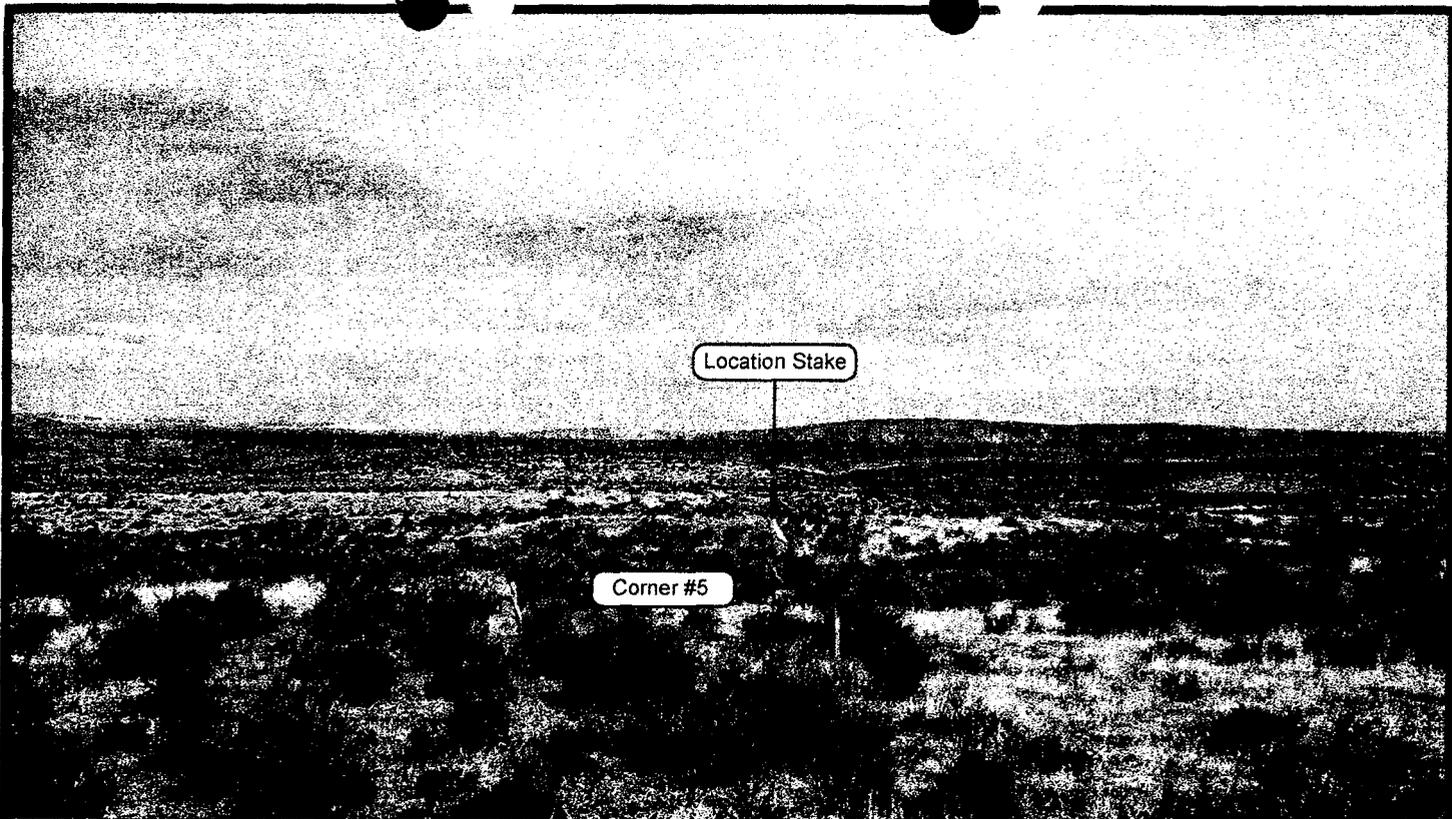


PHOTO VIEW: FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHERLY



PHOTO VIEW: FROM BEGINNING OF PROPOSED ROAD

CAMERA ANGLE: EASTERLY

**THURSTON ENERGY OPERATING COMPANY**

**Thurston 12-29-9-24  
SECTION 29, T9S, R24E, S.L.B.&M.  
1973' FSL & 656' FWL**

**LOCATION PHOTOS**

DATE TAKEN: 04-08-06

DATE DRAWN: 04-14-06

TAKEN BY: K.R.K.

DRAWN BY: M.W.W.

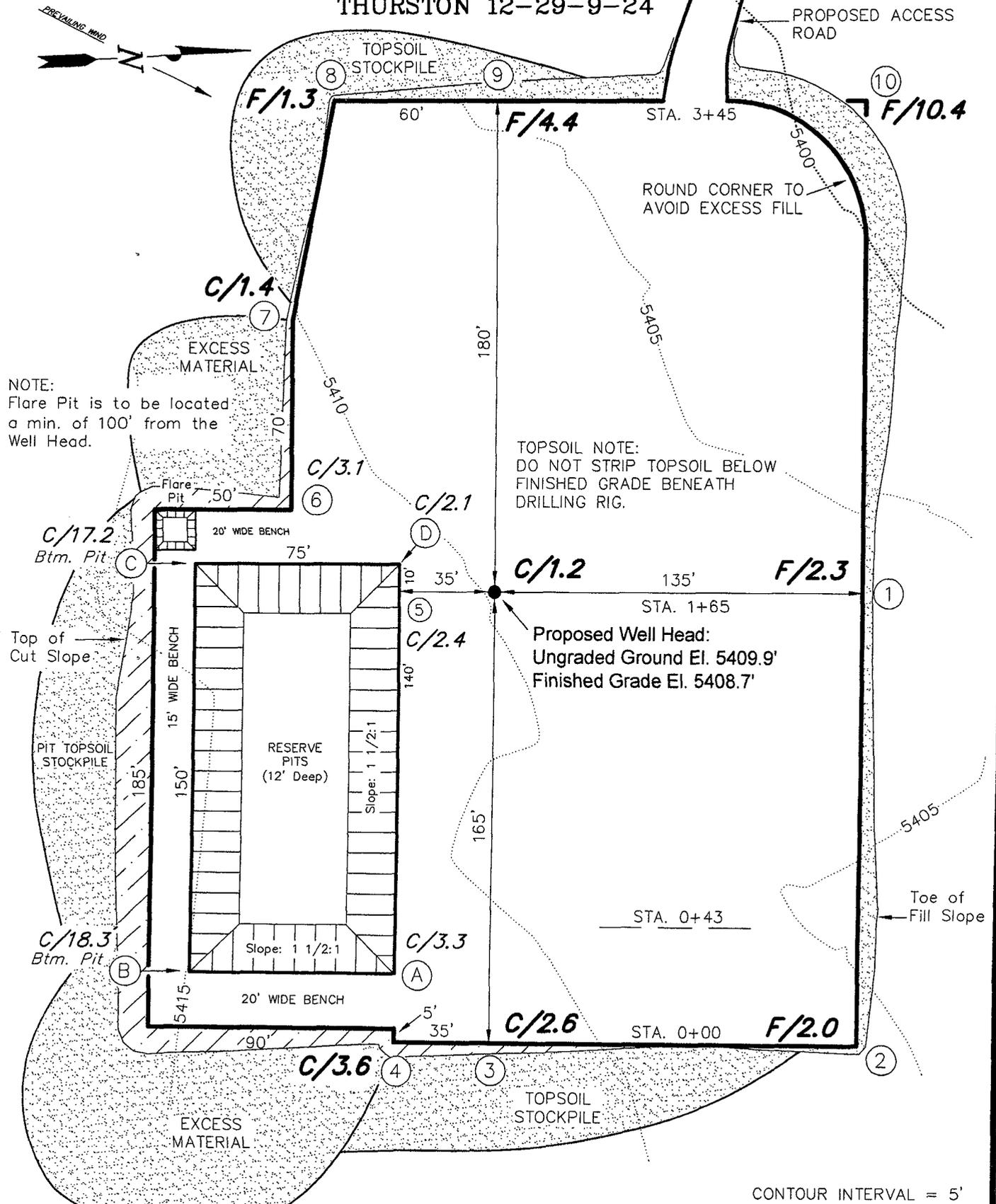
REVISED:

**Timberline Land Surveying, Inc.**  
38 West 100 North Vernal, Utah 84078  
(435) 789-1365

**SHEET  
1  
OF 10**

# THURSTON ENERGY OPERATING COMPANY

## CUT SHEET THURSTON 12-29-9-24



TOPSOIL NOTE:  
DO NOT STRIP TOPSOIL BELOW  
FINISHED GRADE BENEATH  
DRILLING RIG.

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

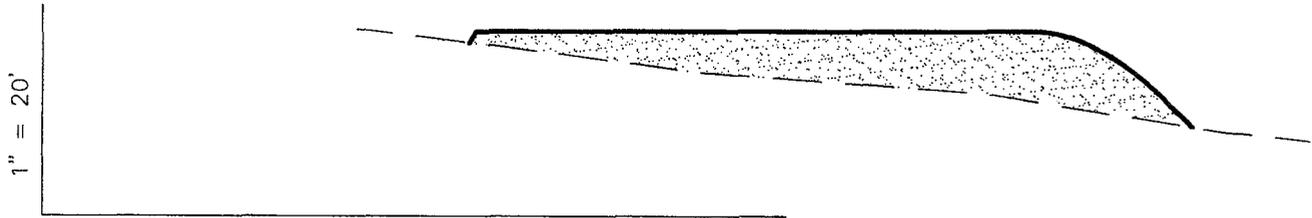
Proposed Well Head:  
Ungraded Ground El. 5409.9'  
Finished Grade El. 5408.7'

CONTOUR INTERVAL = 5'

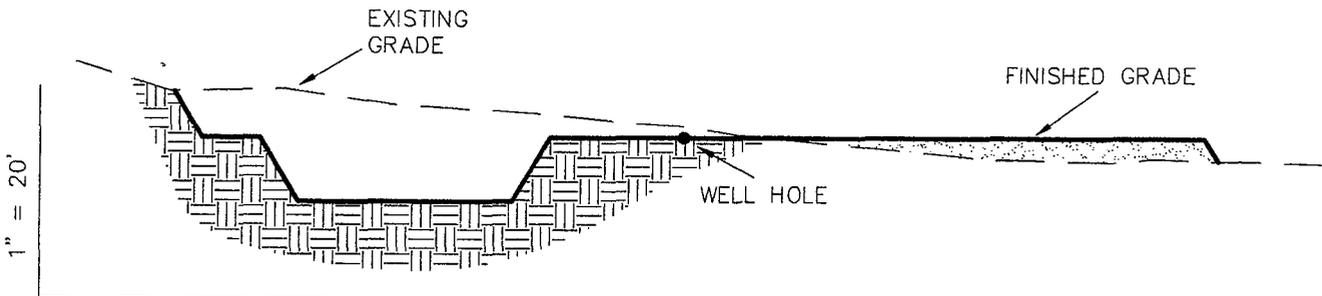
Section 29, T9S, R24E, S.L.B.&M.		Qtr/Qtr Location: NW SW	Footage Location: 1973' FSL & 656' FWL
Date Surveyed: 04-08-06	Date Drawn: 04-14-06	Date Last Revision:	<b>Timberline</b> (435) 789-1365 Land Surveying, Inc. 38 WEST 100 NORTH VERNAL, UTAH 84078
Surveyed By: K.R.K.	Drawn By: M.W.W.	Scale: 1" = 50'	
			SHEET <b>3</b> OF 10

# THURSTON ENERGY OPERATING COMPANY

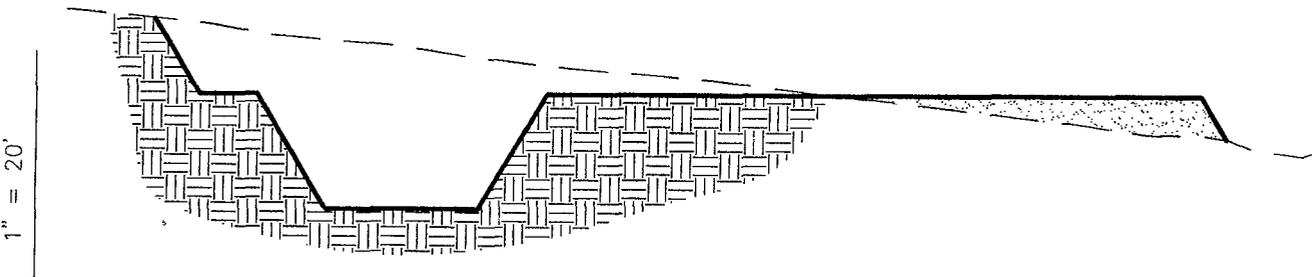
## CROSS SECTIONS THURSTON 12-29-9-24



1" = 50' STA. 3+45

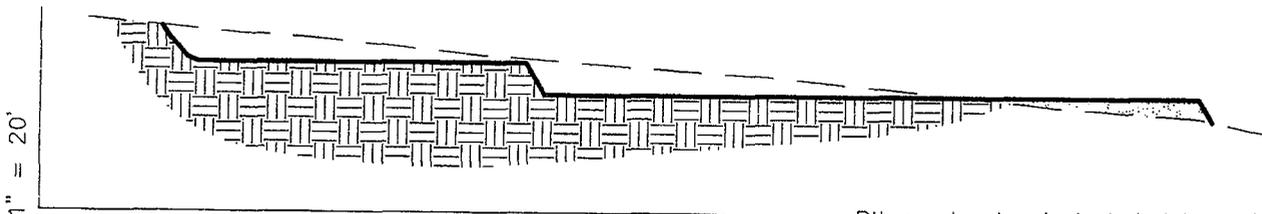


1" = 50' STA. 1+65



1" = 50' STA. 0+43

NOTE:  
UNLESS OTHERWISE NOTED  
ALL CUT/FILL SLOPES ARE  
AT 1.5:1



1" = 50' STA. 0+00

Pit overburden is included in pad cut.

**ESTIMATED EARTHWORK QUANTITIES**  
(No shrink or swell adjustments have been used)  
(Expressed in Cubic Yards)

ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	4,330	5,240	Topsoil is not included in Pad Cut	-910
PIT	3,340	0		3,340
TOTALS	7,670	5,240	1,500	2,430

Excess Material after Pit Rehabilitation = 760 Cu. Yds.

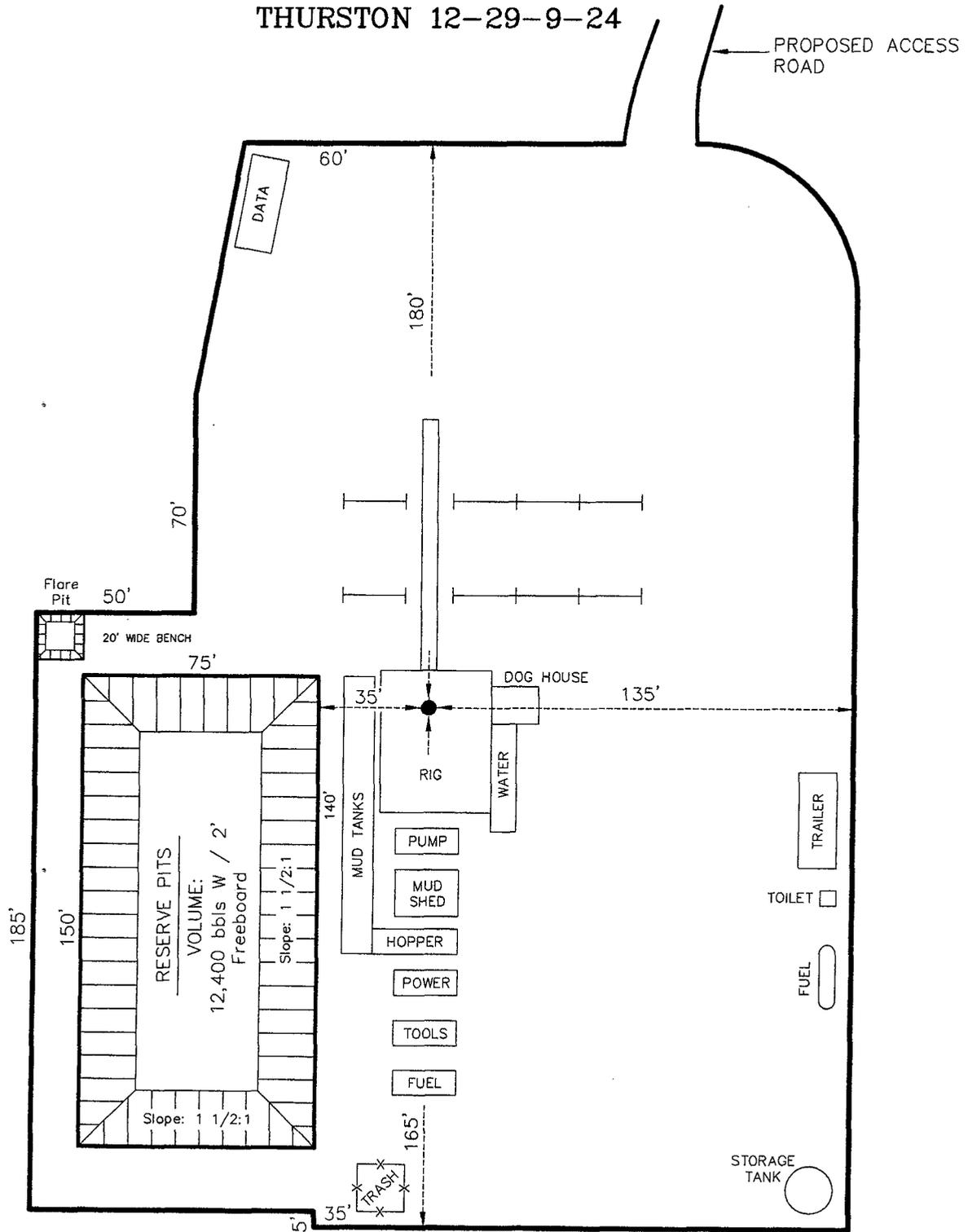
### REFERENCE POINTS

- 185' NORTHERLY = 5405.8'
- 235' NORTHERLY = 5404.5'
- 215' EASTERLY = 5411.8'
- 265' EASTERLY = 5412.0'

Section 29, T9S, R24E, S.L.B.&M.		Qtr/Qtr Location: NW SW	Footage Location: 1973' FSL & 656' FWL
Date Surveyed: 04-08-06	Date Drawn: 04-14-06	Date Last Revision:	<b>Timberline</b> (435) 789-1365 Land Surveying, Inc. 38 WEST 100 NORTH VERNAL, UTAH 84078
Surveyed By: K.R.K.	Drawn By: M.W.W.	Scale: 1" = 50'	

# THURSTON ENERGY OPERATING COMPANY

## TYPICAL RIG LAYOUT THURSTON 12-29-9-24

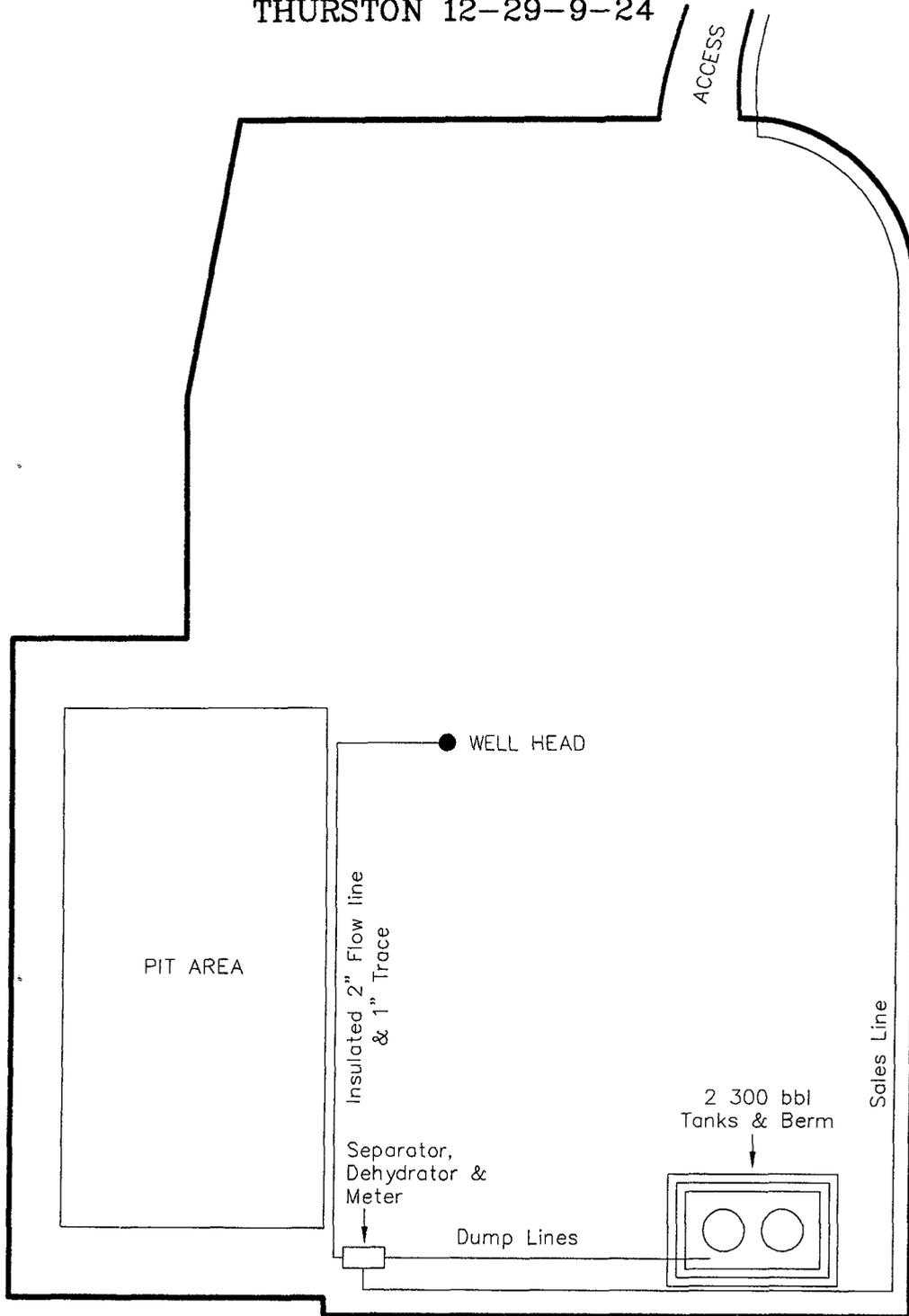


Section 29, T9S, R24E, S.L.B.&M.		Qtr/Qtr Location: NW SW	Footage Location: 1973' FSL & 656' FWL
Date Surveyed: 04-08-06	Date Drawn: 04-14-06	Date Last Revision:	<b>Timberline</b> (435) 789-1365 Land Surveying, Inc. 38 WEST 100 NORTH VERNAL, UTAH 84078
Surveyed By: K.R.K.	Drawn By: M.W.W.	Scale: 1" = 50'	
			SHEET <b>5</b> OF 10

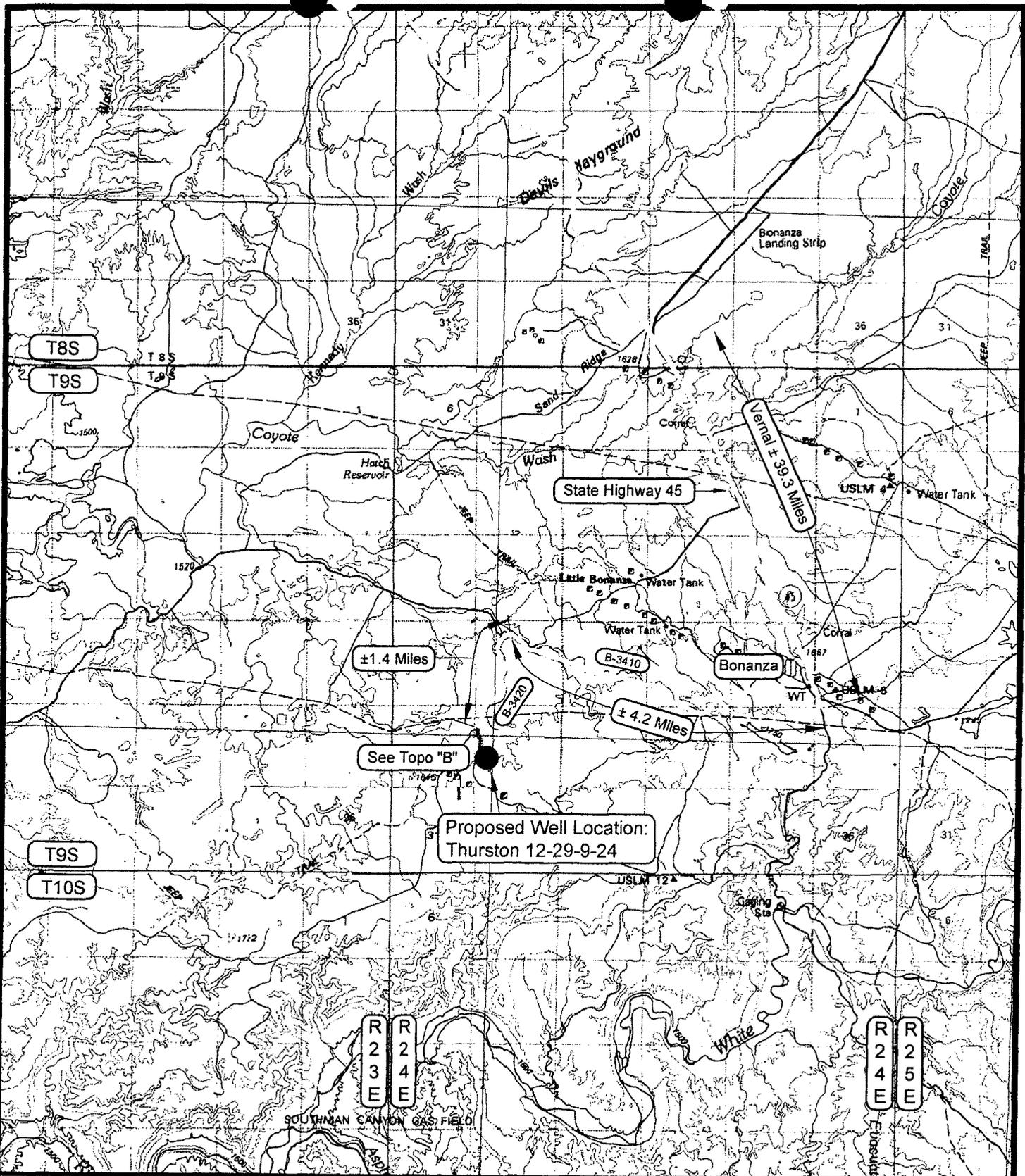
# THURSTON ENERGY OPERATING COMPANY

## TYPICAL PRODUCTION LAYOUT

THURSTON 12-29-9-24



Section 29, T9S, R24E, S.L.B.&M.		Qtr/Qtr Location: NW SW	Footage Location: 1973' FSL & 656' FWL
Date Surveyed: 04-08-06	Date Drawn: 04-14-06	Date Last Revision:	<b>Timberline</b> (435) 789-1365 <i>Land Surveying, Inc.</i> 38 WEST 100 NORTH VERNAL, UTAH 84078
Surveyed By: K.R.K.	Drawn By: M.W.W.	Scale: 1" = 50'	
			SHEET <b>6</b> OF 10



**LEGEND**

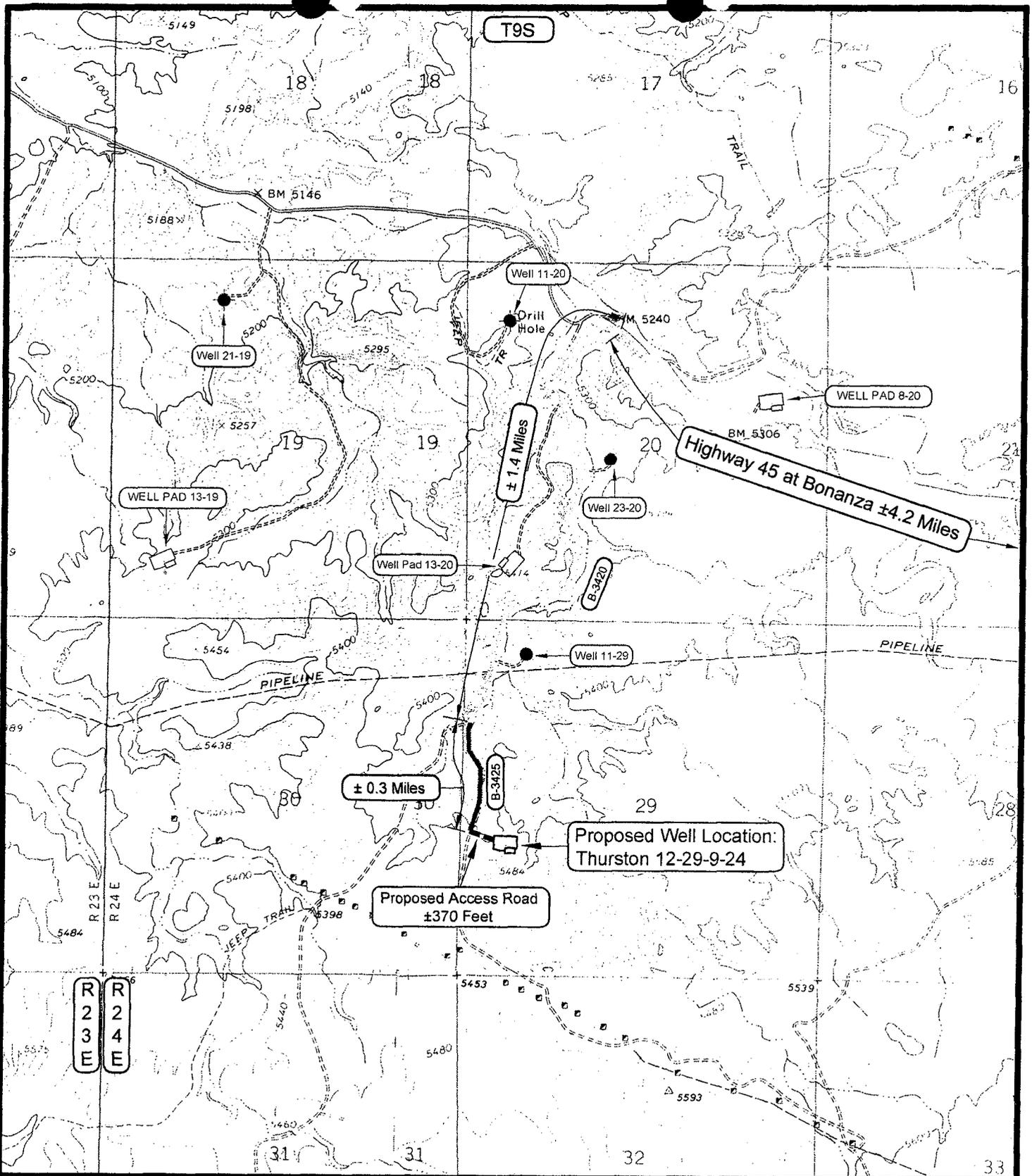
- — — — — = SUBJECT WELL
- = OTHER WELLS
- — — — — = EXISTING ROAD
- — — — — = EXISTING ROAD (TO BE IMPROVED)
- (B-5460) = COUNTY ROAD CLASS & NUMBER

<b>TOPOGRAPHIC MAP "A"</b>		DATE SURVEYED: 04-08-06
		DATE DRAWN: 04-14-06
SCALE: 1:100,000	DRAWN BY: M.W.W.	REVISED:

**THURSTON ENERGY OPERATING COMPANY**

**Thurston 12-29-9-24**  
**SECTION 29, T9S, R24E, S.L.B.&M.**  
**1973' FSL & 656' FWL**

<b>Timberline Land Surveying, Inc.</b> 38 West 100 North Vernal, Utah 84078 (435) 789-1365		<b>SHEET</b> <b>7</b> <b>OF 10</b>
--	--	--



**LEGEND**

- = PROPOSED ACCESS ROAD
- = SUBJECT WELL
- = SHARED ACCESS
- = EXISTING ROAD
- = EXISTING ROAD (TO BE IMPROVED)
- (B-5460) = COUNTY ROAD CLASS & NUMBER
- = LEASE LINE AND / OR PROPERTY LINE

**THURSTON ENERGY OPERATING COMPANY**

**Thurston 12-29-9-24**  
**SECTION 29, T9S, R24E, S.L.B.&M.**  
**1973' FSL & 656' FWL**

**TOPOGRAPHIC MAP "B"**

SCALE: 1" = 2000'

DRAWN BY: M.W.W.

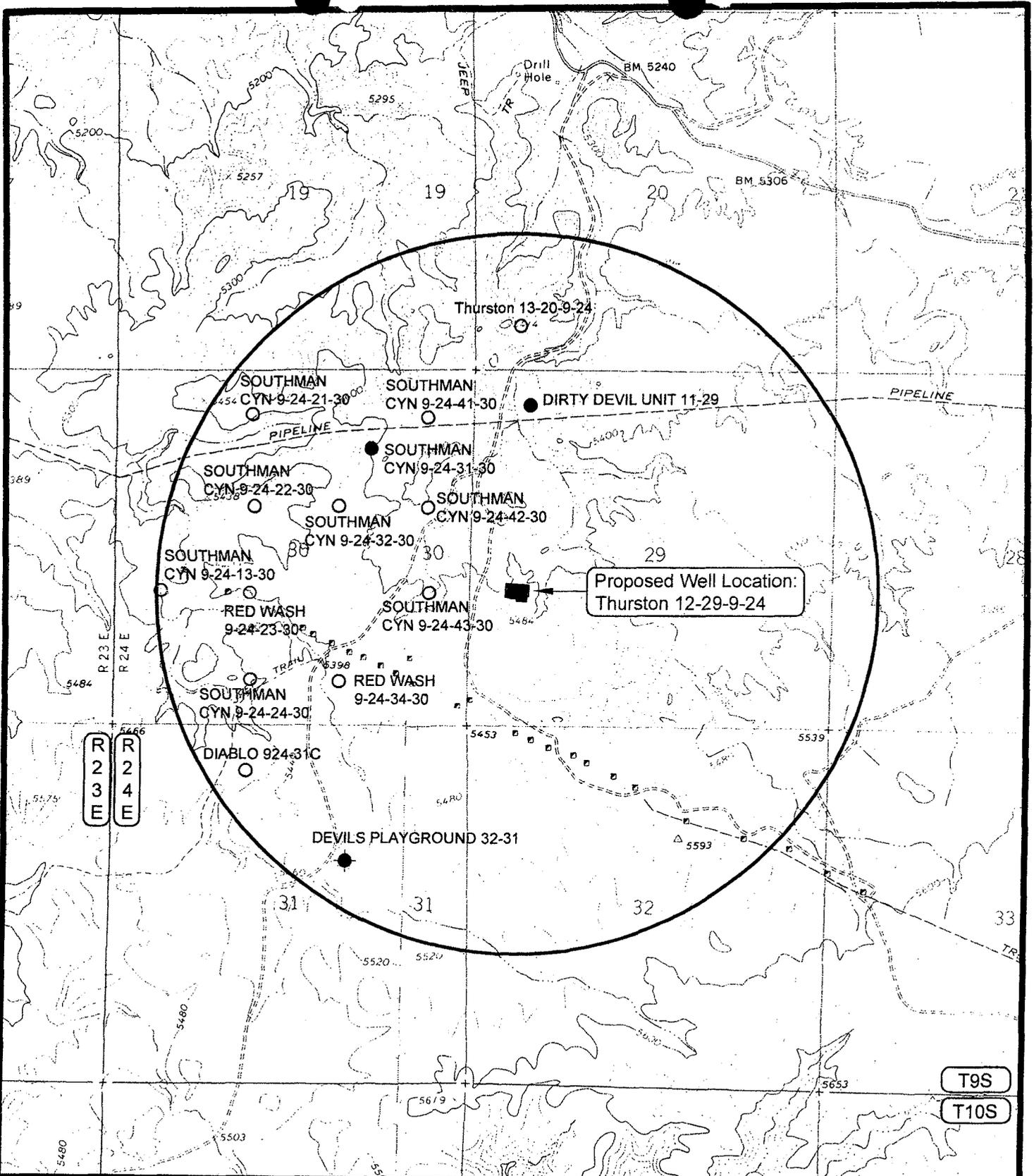
DATE SURVEYED: 04-08-06

DATE DRAWN: 04-14-06

REVISED:

**Timberline Land Surveying, Inc.**  
 38 West 100 North Vernal, Utah 84078  
 (435) 789-1365

**SHEET**  
**8**  
**OF 10**



R  
2  
3  
E

R  
2  
4  
E

T9S

T10S

**LEGEND**

- ⊙ = DISPOSAL WELL
- = PRODUCING WELL
- = SHUT IN WELL
- = PROPOSED WELL
- ⊙ = WATER WELL
- = ABANDONED WELL
- = TEMPORARILY ABANDONED WELL
- ⊙ = ABANDONED LOCATION

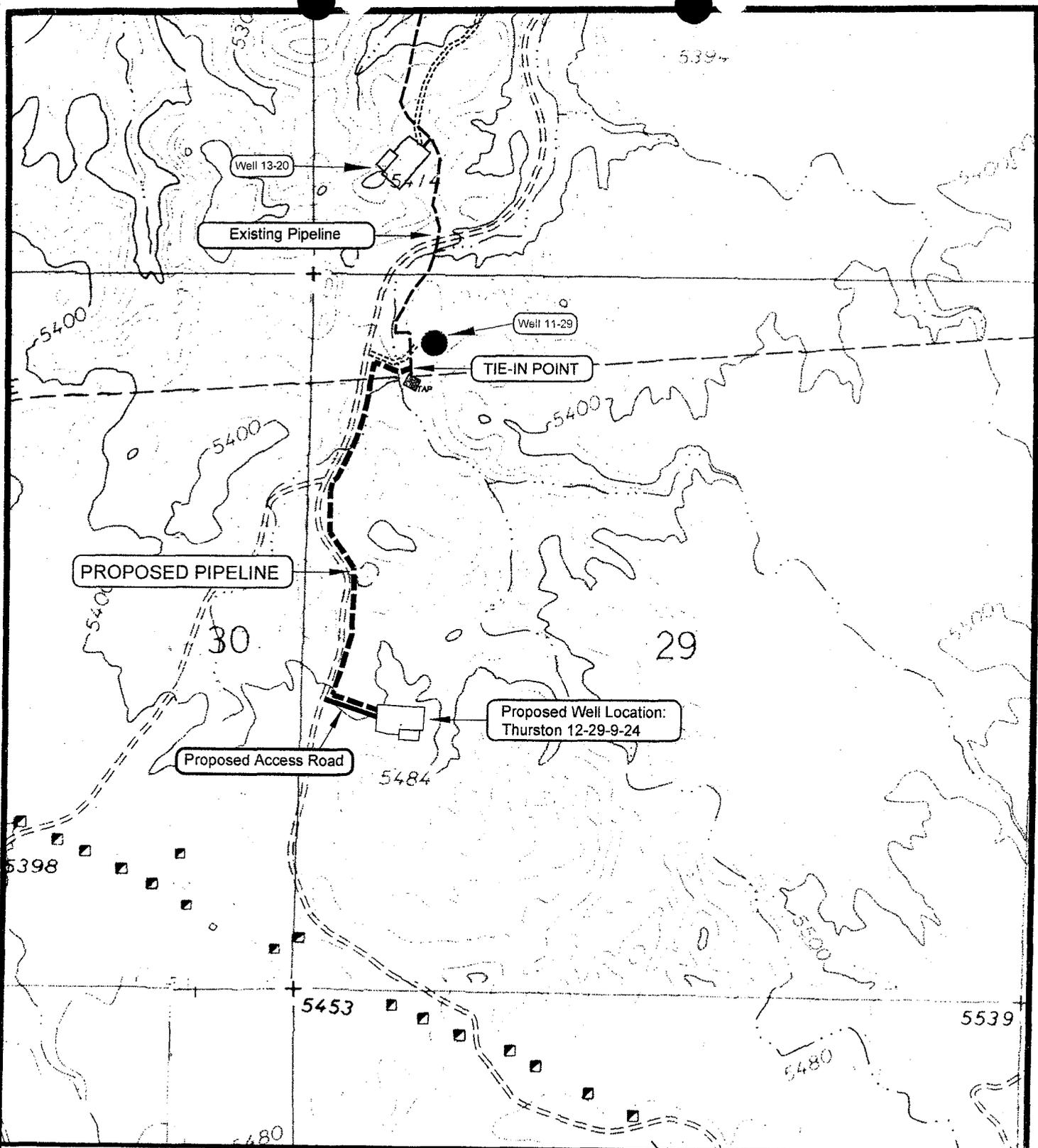
**THURSTON ENERGY OPERATING COMPANY**

**Thurston 12-29-9-24**  
**SECTION 29, T9S, R24E, S.L.B.&M.**  
**1973' FSL & 656' FWL**

<b>TOPOGRAPHIC MAP "C"</b>		DATE SURVEYED: 04-08-06
SCALE: 1" = 2000'	DRAWN BY: M.W.W.	DATE DRAWN: 04-14-06
		REVISED:

**Timberline Land Surveying, Inc.**  
 38 West 100 North Vernal, Utah 84078  
 (435) 789-1365

**SHEET**  
**9**  
**OF 10**



APPROXIMATE PIPELINE LENGTH = ± 3,200 Feet

**LEGEND**

- = PROPOSED PIPELINE
- - - - = OTHER PIPELINE
- - - - = PROPOSED ACCESS ROAD
- = SUBJECT WELL
- = OTHER WELLS
- ..... = LEASE LINE AND / OR PROPERTY LINE

TOPOGRAPHIC MAP "D"	DATE SURVEYED: 04-08-06
	DATE DRAWN: 04-14-06
SCALE: 1" = 1000'	DRAWN BY: M.W.W.
	REVISED:

**THURSTON ENERGY OPERATING COMPANY**

**Thurston 12-29-9-24**  
**SECTION 29, T9S, R24E, S.L.B.&M.**  
**1973' FSL & 656' FWL**

**Timberline Land Surveying, Inc.**  
 38 West 100 North Vernal, Utah 84078  
 (435) 789-1365

SHEET  
**10**  
 OF 10

**WORKSHEET  
APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 03/15/2010

API NO. ASSIGNED: 43-047-40628

WELL NAME: THURSTON 12-29-9-24  
 OPERATOR: THURSTON ENERGY ( N2790 )  
 CONTACT: BILL RYAN

PHONE NUMBER: 435-789-0968

PROPOSED LOCATION:

NWSW 29 090S 240E  
 SURFACE: 1973 FSL 0656 FWL  
 BOTTOM: 1973 FSL 0656 FWL  
 COUNTY: UINTAH  
 LATITUDE: 40.00516 LONGITUDE: -109.24434  
 UTM SURF EASTINGS: 649859 NORTHINGS: 4429596  
 FIELD NAME: UNDESIGNATED ( 2 )

INSPECT LOCATN BY: / /		
Tech Review	Initials	Date
Engineering	DKD	5/6/10
Geology		
Surface		

LEASE TYPE: 3 - State  
 LEASE NUMBER: ML-22161  
 SURFACE OWNER: 1 - Federal

PROPOSED FORMATION: CSLGT  
 COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

- Plat
- Bond: Fed[] Ind[] Sta[] Fee[]  
(No. 0269435251 )
- Potash (Y/N)
- Oil Shale 190-5 (B) or 190-3 or 190-13
- Water Permit  
(No. T-75376 )
- RDCC Review (Y/N)  
(Date: \_\_\_\_\_ )
- Fee Surf Agreement (Y/N)
- 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: 179-15  
Eff Date: 7-17-2008  
Siting: 460' fr ext. lease boundary
- \_\_\_ R649-3-11. Directional Drill

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

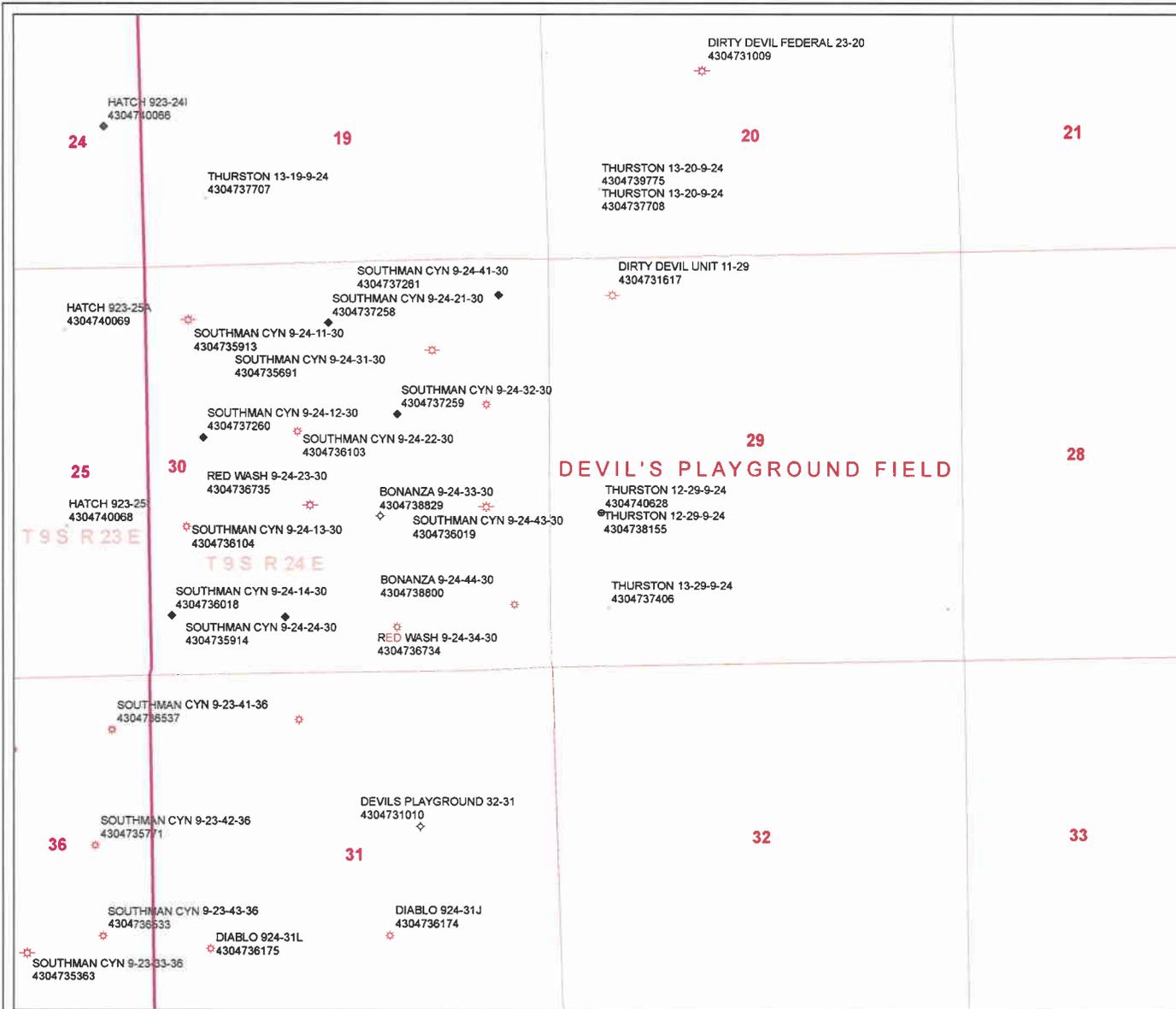
STIPULATIONS: \_\_\_\_\_

- 1- Federal Approval
- 2- Spacing Unit
- 3- STATEMENT OF BASIS
- 4- Cont stip #3 (4 1/2" production, 2500' MD)

API Number: 4304740628  
 Well Name: THURSTON 12-29-9-24  
 Township 09.0 S Range 24.0 E Section 29  
 Meridian: SLBM  
 Operator: THURSTON ENERGY OPERATING

Map Prepared:  
 Map Produced by Diana Mason

- | Units         | Wells Query                           |
|---------------|---------------------------------------|
| STATUS        | X -> All other values                 |
| ACTIVE        | APD - Approved Permit                 |
| EXPLORATORY   | (4) DRL - Spaced (Drilling Commenced) |
| GAS STORAGE   | CAW - Gas Injection                   |
| NF PP OIL     | CS - Gas Storage                      |
| NF SECONDARY  | LA - Location Abandoned               |
| PP OIL        | LOC - New Location                    |
| PP GAS        | OPS - Operation Suspended             |
| PP GEOTHERMAL | PA - Plugged Abandoned                |
| PP OIL        | POW - Producing Gas Well              |
| SECONDARY     | POW - Producing Oil Well              |
| TERMINATED    | RET - Returned APD                    |
| Fields        | SDW - Shut-in Gas Well                |
| Sectore       | SDW - Shut-in Oil Well                |
| Township      | TA - Temp Abandoned                   |
|               | TW - Test Well                        |
|               | WDW - Water Deposit                   |
|               | WIW - Water Injection Well            |
|               | WSW - Water Supply Well               |



# Application for Permit to Drill

## Statement of Basis

3/23/2010

Utah Division of Oil, Gas and Mining

Page 1

<b>APD No</b>	<b>API WellNo</b>	<b>Status</b>	<b>Well Type</b>	<b>Surf Ownr</b>	<b>CBM</b>
2511	43-047-40628-00-00		GW	F	No
<b>Operator</b>	THURSTON ENERGY OPERATING	<b>Surface Owner-APD</b>			
<b>Well Name</b>	THURSTON 12-29-9-24	<b>Unit</b>			
<b>Field</b>	UNDESIGNATED	<b>Type of Work</b>			
<b>Location</b>	NWSW 29 9S 24E S 1973 FSL 656 FWL GPS Coord (UTM) 649859E 4429596N				

### Geologic Statement of Basis

Thurston proposes to set 2,000' of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 3,900'. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the center of Section 29. . The surface formation at this site is the Green River Formation. The Green River Formation is made up of interbedded limestones, shales and sandstones. Fresh water is found in this formation and should be protected. Production casing cement should be brought to above the base of the moderately saline groundwater in order to isolate it from fresher waters uphole.

Brad Hill  
APD Evaluator

3/23/2010  
Date / Time

### Surface Statement of Basis

Surface rights at the proposed well site are owned by the Federal Government. The operator must obtain any surface permits or rights of way from the BLM.

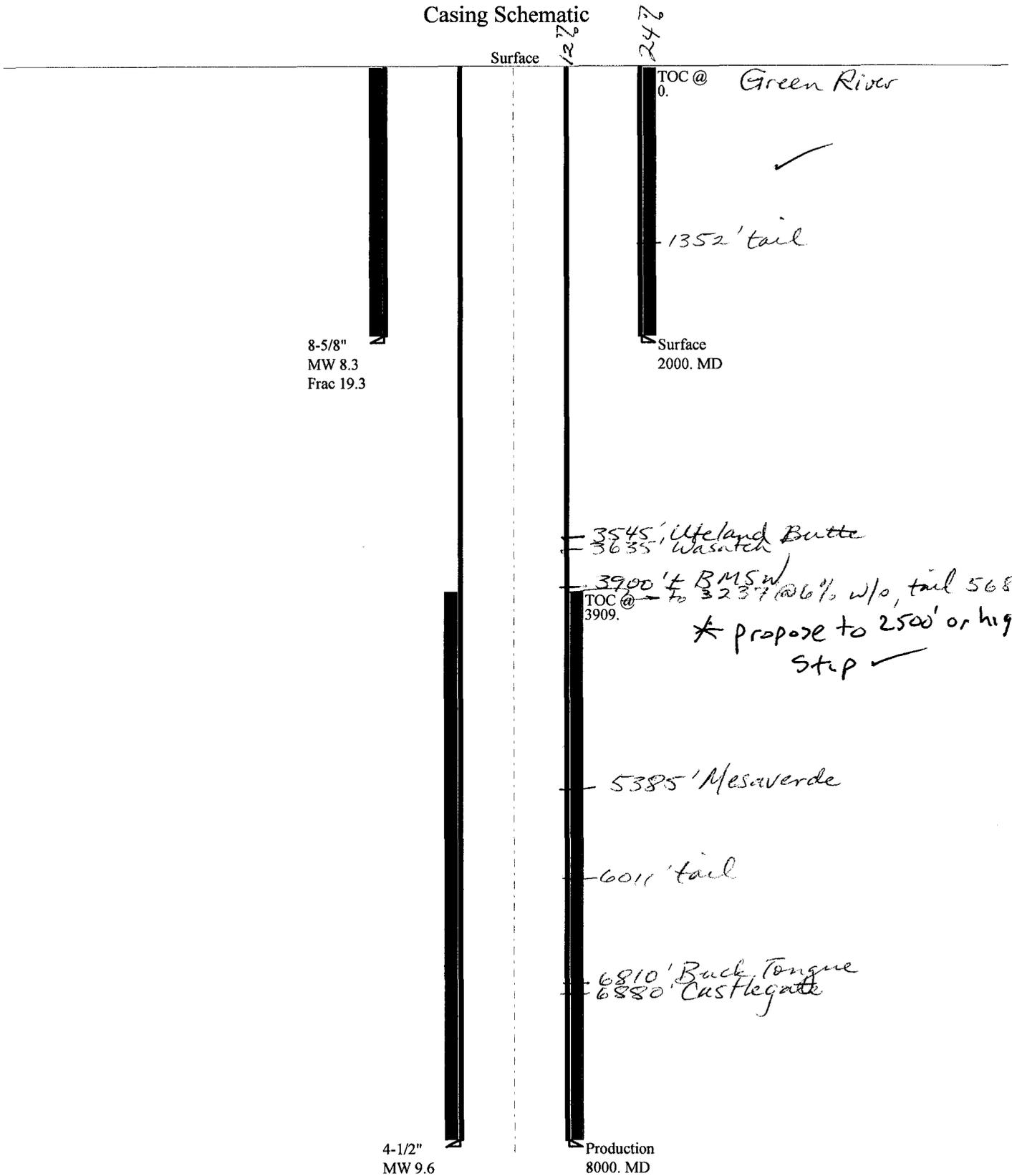
Brad Hill  
Onsite Evaluator

3/23/2010  
Date / Time

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

<b>Category</b>	<b>Condition</b>
Surface	None.

Casing Schematic



8-5/8"  
MW 8.3  
Frac 19.3

TOC @  
0.

Green River

Surface  
2000. MD

1352' tail

3545' Uteland Butte  
3635' Wasatch

3900' ± BMSW  
TOC @ 3909. → F<sub>2</sub> 3237 @ 6% w/o, tail 5685

\* propose to 2500' or higher  
step ✓

5385' Mesaverde

6011' tail

6810' Buck Tongue  
6880' Castlegate

4-1/2"  
MW 9.6

Production  
8000. MD

Well name:

**4304740628000 Thurston 12-29-9-24**Operator: **Thurston Energy Operating Company**String type: **Surface**

Project ID:

43-047-40628-0000

Location: **Uintah County, Utah****Design parameters:****Collapse**Mud weight: 8.330 ppg  
Design is based on evacuated pipe.**Burst**Max anticipated surface  
pressure: 1,760 psi  
Internal gradient: 0.120 psi/ft  
Calculated BHP 2,000 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 buoyed weight.

Neutral point: 1,751 ft

**Environment:**H2S considered? No  
Surface temperature: 75 °F  
Bottom hole temperature: 103 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 1,300 ft

Cement top: Surface

Completion type is subs  
**Non-directional string.****Re subsequent strings:**Next setting depth: 8,000 ft  
Next mud weight: 9.600 ppg  
Next setting BHP: 3,990 psi  
Fracture mud wt: 19.250 ppg  
Fracture depth: 2,000 ft  
Injection pressure: 2,000 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 <sup>3</sup> )
1	2000	8.625	36.00	J-55	ST&C	2000	2000	7.7	667.9
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	865	3450	3.987	2000	4460	2.23	63	434	6.88 J

Prepared by: Helen Sadik-Macdonald  
Div of Oil, Gas & MiningPhone: (801) 538-5357  
FAX: (801) 359-3940Date: May 5, 2010  
Salt Lake City, Utah**Remarks:**

Collapse is based on a vertical depth of 2000 ft, a mud weight of 8.33 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop &amp; Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

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

Well name:

**4304740628000 Thurston 12-29-9-24**

Operator: **Thurston Energy Operating Company**

String type: Production

Project ID:  
43-047-40628-0000

Location: Uintah County, Utah

**Design parameters:**

**Collapse**

Mud weight: 9.600 ppg  
Design is based on evacuated pipe.

**Burst**

Max anticipated surface pressure: 2,230 psi  
Internal gradient: 0.220 psi/ft  
Calculated BHP: 3,990 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: 6,852 ft

**Environment:**

H2S considered? No  
Surface temperature: 75 °F  
Bottom hole temperature: 187 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 1,500 ft

Cement top: 3,909 ft

Completion type is subs  
**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 (ft³)
1	8000	4.5	11.60	N-80	LT&C	8000	8000	3.875	698.1
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	3990	6350	1.592	3990	7780	1.95	93	223	2.40 J

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

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

Date: May 5, 2010  
Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 8000 ft, a mud weight of 9.6 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.

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

**BOPE REVIEW**

Thurston 12-29-9-24

API 43-047-40628-0000

**INPUT**

Well Name

Thurston 12-29-9-24		API 43-047-40628-0000	
String 1	String 2		
Casing Size (")	8 5/8	4 1/2	
Setting Depth (TVD)	2000	8000	
Previous Shoe Setting Depth (TVD)	0	2000	
Max Mud Weight (ppg)	8.4	9.6	✓
BOPE Proposed (psi)	500	3000	
Casing Internal Yield (psi)	4480	7780	
Operators Max Anticipated Pressure (psi)	3000	7.2 ppg	✓

Calculations	String 1	8 5/8 "	
Max BHP [psi]	.052*Setting Depth*MW =	874	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	634	NO Air Drill to surface shoe with diverter
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	434	YES <i>OK</i>
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth) =	434	NO <i>OK</i>
Required Casing/BOPE Test Pressure		2000	psi
*Max Pressure Allowed @ Previous Casing Shoe =		0	psi *Assumes 1psi/ft frac gradient

Calculations	String 2	4 1/2 "	
Max BHP [psi]	.052*Setting Depth*MW =	3994	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	3034	NO
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	2234	YES <i>OK</i>
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth) =	2674	NO <i>OK</i>
Required Casing/BOPE Test Pressure		3000	psi
*Max Pressure Allowed @ Previous Casing Shoe =		2000	psi *Assumes 1psi/ft frac gradient





435-789-0968 Office

435-828-0968 Cell

300 South 730 East

Vernal, UT 84078

Utah Division of Oil Gas & Minerals

April 22, 2010

Re: e-filing, Mud wt.

Thurston 12-29-9-24

Dear sirs

Please find attached new cover sheets filed electronically.

Your office requested additional information on the proposed mud weight used in the drilling program. The mud weight range of 8.4-12 ppg was a range that may occur. Depending on mud cleaning efficiency mud weight may increase above the desired weight for well control. The increase is not required for well control and in fact are not desirable.

The operator erred in reporting an 8.4-12 ppg mud. A mud weight of 8.4-9.6 (10 Point Plan, item 6, page 3) will be appropriate for well control on the subject well.

A BLM Sundry reporting the mud weight change is attached.

William (Bill) Ryan

Owner, Engineer

Thurston Energy Operating Agent

**RECEIVED** April 23, 2010



GARY R. HERBERT  
Governor

GREGORY S. BELL  
Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

June 16, 2010

Thurston Energy Operating Company  
4925 Greenville #900  
Dallas, TX 75206

Subject: Thurston 12-29-9-24 Well, 1973' FSL, 656' FWL, NWSW, Sec. 29, T. 9 South, R. 24  
East, Uintah County, Utah

Ladies and 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 43-047-40628.

Sincerely,

Brad Hill  
Acting Associate Director

BGH/js  
Enclosures

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

**Operator:** Thurston Energy Operating Company

**Well Name & Number** Thurston 12-29-9-24

**API Number:** 43-047-40628

**Lease:** ML-22161

**Location:** NWSW Sec. 29 T. 9 South R. 24 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 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 made to the approved drilling program – contact Dustin Doucet
- 24 hours 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:

- 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

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):

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

3. **Reporting Requirements:**

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with 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 5<sup>th</sup> 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

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. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.
7. 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.
8. Cement volume for the 4 ½" production string shall be determined from actual hole diameter in order to place cement from the pipe setting depth back to 2500' MD as indicated in the submitted drilling plan.

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> ML-22161
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>  <b>7. UNIT or CA AGREEMENT NAME:</b>
<b>1. TYPE OF WELL</b> Gas Well	<b>8. WELL NAME and NUMBER:</b> THURSTON 12-29-9-24
<b>2. NAME OF OPERATOR:</b> THURSTON ENERGY OPERATING	<b>9. API NUMBER:</b> 43047406280000
<b>3. ADDRESS OF OPERATOR:</b> 365 W. 50 N. Ste W-8 , Vernal, UT, 84078	<b>PHONE NUMBER:</b> 214 704-3896 Ext
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1973 FSL 0656 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSW Section: 29 Township: 09.0S Range: 24.0E Meridian: S	<b>9. FIELD and POOL or WILDCAT:</b> DEVILS PLAYGROUND  <b>COUNTY:</b> UINTAH  <b>STATE:</b> UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE  <input type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input type="checkbox"/> APD EXTENSION  OTHER: <input type="text" value="notice of ROW approval"/>
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 11/18/2010			
<input type="checkbox"/> SPUD REPORT Date of Spud:			
<input type="checkbox"/> DRILLING REPORT Report Date:			

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
 Please find attached copies of BLM approved ROW's #UTU-85916 for access road and well pad and UTU-85919 for pipeline for the Thurston 12-29-9-24 well, API #4304740628. We are providing this information to satisfy the conditions of approval from letter dated 6/16/10.

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

<b>NAME (PLEASE PRINT)</b> Russell H. Cox	<b>PHONE NUMBER</b> 435 789-8580	<b>TITLE</b> Operations Manager
<b>SIGNATURE</b> N/A	<b>DATE</b> 11/30/2010	

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NOV 22 2010



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Green River District Office

Vernal Field Office

170 South 500 East

Vernal, UT 84078

<http://www.blm.gov/ut/st/en/fo/vernal.html>



NOV 18 2010

In Reply Refer To:  
2800/2880 (UTG011)  
UTU-85916, UTU-85917

CERTIFIED MAIL- RETURN RECEIPT REQUESTED: 7010 1670 0001 2223 2439

DECISION

Thurston Energy Operating Company :  
365 West 50 North, Suite 8 : Right-of-Way Applications  
Vernal, Utah 84078 : UTU-85916 & UTU-85917

Right-of-Way Grants UTU-85916 & UTU-85917 Issued

Enclosed is a copy of right-of-way grant, serial number UTU-85916, which includes the proposed 1957-foot long by 30-foot wide access road and the proposed 300-foot long by 400 feet wide Thurston 12-29-9-24 well pad, which have been approved by the Bureau of Land Management.

Also enclosed is a copy of right-of-way grant, serial number UTU-85917, which includes the proposed 3200-foot long by 15-foot wide 3-inch steel, surface laid pipeline for the proposed Thurston 12-29-9-24 well, which has been approved by the Bureau of Land Management.

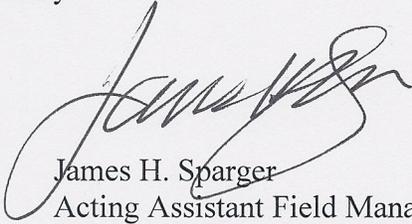
The bond, rental and monitoring fees have been received.

Within 30 days of receipt of this decision, you have the right of appeal to the Board of Land Appeals, Office of the Secretary, in accordance with the regulations in 43 CFR 4.400. If an appeal is taken, you must follow the procedures outlined in the enclosed Form 1842-1, Information on Taking Appeals to the Board of Land Appeals. Within 30 days after you appeal, you are required to provide a Statement of Reasons to the Board of Land Appeals and a copy to the Regional Solicitor's office listed in Item 3 on the form. The appellant has the burden of showing that the decision appealed from is in error.

If you appeal this decision, please provide this office with a copy of your Statement of Reasons.

RECEIVED November 30, 2010

This decision, under the provisions of 43 CFR 2800 constitutes a final decision and remains in full force and effect during an appeal unless the Secretary rules otherwise. Refer to 43 CFR 2804 for the requirements for filing a petition for stay.



James H. Sparger  
Acting Assistant Field Manager  
Lands & Minerals Resources

Enclosures

(1) Right-of-Way Grant UTU-85916

(1) Right-of-Way Grant UTU-85917

Form 1842-1 Information on Taking Appeals to the Board of Land Appeals

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
**RIGHT-OF-WAY GRANT**

**UTU-85916**

1. A right-of-way is hereby granted pursuant to Title V of the Federal Land Policy and Management Act of October 21, 1976, as amended through September 1999, (90 Stat. 2776; 43 U.S.C. 1761).

2. Nature of Interest:

a. By this instrument, the holder

Thurston Energy Operating Company  
2754 W. Hwy. 40  
P.O. Box 240  
Vernal, Utah 84078

receives a right to construct, operate, maintain, and terminate an access road and well pad on public lands within the following legal description:

Salt Lake Meridian  
T. 9 S., R. 24 E.,  
sec. 29, W $\frac{1}{2}$ NW $\frac{1}{4}$ , NW $\frac{1}{4}$ SW $\frac{1}{4}$ .

- b. The right-of-way area granted herein for the access road is 1954 feet in length and 30 feet in width, the right-of-way area granted herein for the well pad location is 300 feet in length and 400 feet in width consisting of 4.101 acres more or less.
- c. In case of a change of address, the holder shall immediately notify the authorized officer.
- d. This instrument shall terminate upon the expiration of the State Oil and Gas Lease ML-22161 or December 31, 2039, unless, prior thereto, it is relinquished, abandoned, terminated, or modified pursuant to the terms and conditions of this instrument or of any applicable Federal law or regulation.
- e. This instrument may be renewed. If renewed, the right-of-way shall be subject to the regulations existing at the time of renewal and any other terms and conditions that the authorized officer deems necessary to protect the public interest.

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**BLM VERNAL, UTAH**

- f. Notwithstanding the expiration of this instrument or any renewal thereof, early relinquishment, abandonment, or termination, the provisions of this instrument, to the extent applicable, shall continue in effect and shall be binding on the holder, its successors, or assigns, until they have fully satisfied the obligations and/or liabilities accruing herein before or on account of the expiration, or prior termination, of the grant.

3. Rental:

- a. For and in consideration of the rights granted, the holder agrees to pay the Bureau of Land Management fair market value rental as determined by the authorized officer unless specifically exempted from such payment by regulation. Provided, however, that the rental may be adjusted by the authorized officer, whenever necessary, to reflect changes in the fair market rental value as determined by the application of sound business management principles, and so far as practicable and feasible, in accordance with comparable commercial practices.

BLM Vernal Field Office  
170 South 500 East  
Vernal, Utah 84078

4. Terms and Conditions:

- a. This grant is issued subject to the holder's compliance with all applicable regulations contained in Title 43 Code of Federal Regulations parts 2800.
- b. Upon grant termination by the authorized officer, all improvements shall be removed from the public lands within 182 days, or otherwise disposed of as provided in paragraph (4)(d) or as directed by the authorized officer.
- c. Each grant issued pursuant to the authority of paragraph (1) for a term of 20 years or more shall, at a minimum, be reviewed by the authorized officer at the end of the 20th year and at regular intervals thereafter not to exceed 10 years. Provided, however, that a right-of-way or permit granted herein may be reviewed at any time deemed necessary by the authorized officer.
- d. The stipulations, map set forth as Exhibit A, and dated May 25, 2006, and attached hereto, are incorporated into and made a part of this grant instrument as fully and effectively as if they were set forth herein in its entirety.
- e. Failure of the holder to comply with applicable law or any provision of this right-of-way grant or permit shall constitute grounds for suspension or termination thereof.

- f. The holder shall perform all operations in a good and workmanlike manner so as to ensure protection of the environment and the health and safety of the public.
- g. The holder of this right-of-way grant or the holder's successor in interest shall comply with Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000D et seq.) and the regulations of the Secretary of the Interior issued pursuant thereto.
- h. The holder shall comply with the construction practices and mitigating measures established by 33 CFR 323.4, which sets forth the parameters of the nationwide permit required by Section 404 of the Clean Water Act. If the proposed action exceeds the parameters of the nationwide permit, the holder shall obtain an individual permit from the appropriate office of the Army Corps of Engineers and provide the authorized officer with a copy of same. Failure to comply with this requirement shall be cause for suspension or termination of this right-of-way grant.
- i. Holder shall maintain the right-of-way in a safe, usable condition, as directed by the authorized officer.
- j. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.
- k. Use of pesticides shall comply with the applicable Federal and state laws. Pesticides shall be used only in accordance with their registered uses and within limitations imposed by the Secretary of the Interior. Prior to the use of pesticides, the holder shall obtain from the authorized officer written approval of a plan showing the type and quantity of material to be used, pests(s) to be controlled, method of application, location of storage and disposal of containers and any other information deemed necessary by the authorized officer. Emergency use of pesticides shall be approved in writing by the authorized officer prior to such use.
- l. The holder shall be responsible for noxious weed control on disturbed areas within the limits of the right-of-way. The holder is responsible to pressure wash all vehicles and equipment entering the project area.
- m. The holder shall protect all survey monuments found within the right-of-way. Survey monuments include, but are not limited to, General Land Office and

Bureau of Land Management Cadastral Survey Corners, reference corners, witness points, U.S. Coastal and Geodetic benchmarks and triangulation stations, military control monuments, and recognizable civil (both public and private) survey monuments. In the event of obliteration or disturbance of any of the above, the holder shall immediately report the incident, in writing, to the authorized officer. Where General Land Office or Bureau of Land Management right-of-way monuments or references are obliterated during operations, the holder shall secure the services of a registered land surveyor or a Bureau cadastral surveyor to restore the disturbed monuments and references using surveying procedures found in the Manual of Surveying Instructions for the Survey of the Public Lands in the United States, latest edition. The holder shall record such survey in the appropriate county and send a copy to the authorized officer. If the Bureau cadastral surveyors or other Federal surveyors are used to restore the disturbed survey monument, the holder shall be responsible for the survey cost.

- n. Every reasonable effort will be made to prevent, control, or suppress any fire in the operation area. Uncontrolled fires must be immediately reported to the BLM Vernal Field Office.
- o. The Holder shall comply with all applicable local, state, and federal air, water, hazardous substance, solid waste, or other environmental laws and regulations, existing or hereafter enacted or promulgated. To the full extent permissible by law, the Holder agrees to indemnify and hold harmless, within the limits, if any, established by state law (as state law exists on the effective date of the right-of-way/lease), the United States against any liability arising from the Holder's use or occupancy of the right-of way/lease area, regardless of whether the Holder has actually developed or caused development to occur on the right-of-way/lease area, from the time of the issuance of this right-of-way/lease to the Holder, and during the term of this right-of-way/lease. This agreement to indemnify and hold harmless the United States against any liability shall apply without regard to whether the liability is caused by the Holder, its agents, contractors, or third parties. If the liability is caused by third parties, the Holder will pursue legal remedies against such third parties, as if the Holder were the fee owner of the right-of-way/lease area.

Notwithstanding any limits to the Holder's ability to indemnify and hold harmless the United States which may exist under state law, the Holder agrees to bear all responsibility (financial or other) for any and all liability or responsibility of any kind or nature assessed against the United States, arising from the Holder's use or occupancy of the right-of way/lease area, regardless of whether the Holder has actually developed or caused development to occur on the right-of-way/lease area, from the time of the issuance of this right-of-way/lease to the Holder, and during the term of this right-of-way/lease.

- p. No hazardous material, substance, or hazardous waste, (as these terms are defined

in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, *et seq.*, or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, *et seq.*) shall be used, produced, transported, released, disposed of, or stored within the right-of-way/lease area at any time by the Holder. The Holder shall immediately report any release of hazardous substances (leaks, spills, etc.), caused by the Holder or third parties, in excess of the reportable quantity as required by federal, state, or local laws and regulations. A copy of any report required or requested by any federal, state or local government agency as a result of a reportable release or spill of any hazardous substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved federal, state or local government agency.

The Holder shall immediately notify the Authorized Officer of any release of hazardous substances, toxic substances, or hazardous waste on or near the right-of-way/lease area, potentially affecting the right-of-way/lease area, of which the Holder is aware.

As required by law, Holder shall have responsibility for and shall take all action(s) necessary to fully remediate and address the hazardous substance(s) on or emanating from the right-of way/lease area.

- q. The grant will be issued subject to all valid and existing rights.
- r. A copy of the complete right-of-way grant, including all stipulations and approved plan of development, shall be made available on the right-of-way area during construction, operation, and termination to the authorized officer. Noncompliance with the above will be grounds for an immediate temporary suspension of activities if it constitutes a threat to public health and safety.
- s. In the event that the public land underlying the right-of-way (ROW) encompassed in this grant, or a portion thereof, is conveyed out of Federal ownership and administration of the ROW or the land underlying the ROW is not being reserved to the United States in the patent/deed and/or the ROW is not within a ROW corridor being reserved to the United States in the patent/deed, the United States waives any right it has to administer the right-of-way, or portion thereof, within the conveyed land under Federal laws, statutes, and regulations, including the regulations at 43 CFR Part 2800, including any rights to have the holder apply to BLM for amendments, modifications, or assignments and for BLM to approve or recognize such amendments, modifications, or assignments. At the time of conveyance, the patentee/grantee, and their successors and assigns, shall succeed to the interests of the United States in all matters relating to the right-of-way, or portion thereof, within the conveyed land and shall be subject to applicable State and local government laws, statutes, and ordinances. After conveyance, any disputes concerning compliance with the use and terms and conditions of the ROW shall be considered a civil matter between the patentee/grantee and the

ROW Holder.

- t. No surface disturbing activities shall take place on the subject right-of-way until the associated APD is approved. The holder will adhere to the surface use plan, any special stipulations, and/or conditions of approval attached to the APD, relevant to any right-of-way facilities.
- u. The holder shall contact the authorized officer at least 48 hours prior to the anticipated start of reclamation activities. The authorized officer may require and schedule a pre-reclamation conference with the holder prior to the holder's commencing of reclamation activities on the right-of-way. The holder and/or his representative shall attend this conference. The holder's contractor, or agents involved with reclamation activities associated with the right-of-way, shall also attend this conference to review the stipulations of the grant, including the plan of development and/or reclamation plan. Please contact the BLM Vernal Field Office at 435-781-4400 and ask for a member of the Reclamation Team or Realty Staff regarding the pre-reclamation conference.
- v. Following completion of the access road and well location, grantee will have 60 days to submit an "as built", survey map or shapefile in a form acceptable to the authorized officer, showing the new centerline.
- w. Livestock Grazing Mitigation.  
Negative impacts to the existing reservoir should be avoided. If reservoir is silted in, coordination between operator, BLM, and range permittee for cleaning would be desirable.
- x. Vegetation including Invasive Plants and Noxious Weeds Mitigation
  - A pre-project inventory for Utah noxious weeds shall be conducted prior to the beginning of surface disturbing activities and results reported to the BLM Weed Coordinator prior to surface disturbance occurring.
  - All vehicles and equipment that was previously operated outside the Uinta Basin shall be power-washed.
  - In areas where noxious weeds are already present, all vehicles and equipment shall be power-washed before moving to a new project area.
  - Certified noxious weed free seed and mulch shall be used in all reclamation.
  - Weeds shall be controlled within the disturbance area.
  - All disturbance areas shall be monitored for noxious weeds **annually**, for a minimum of three growing seasons following completion of project or until desirable vegetation is established.
  - A Pesticide Use Proposal shall be submitted and approved prior to chemical weed control on BLM lands.

y. Colorado River Fish Species Mitigation:

The best method to avoid entrainment is to pump from an off-channel location – one that does not connect to the river during high spring flows. An infiltration gallery constructed in a BLM and Service approved location is best.

If the pump head is located in the river channel where larval fish are known to occur, the following measures apply:

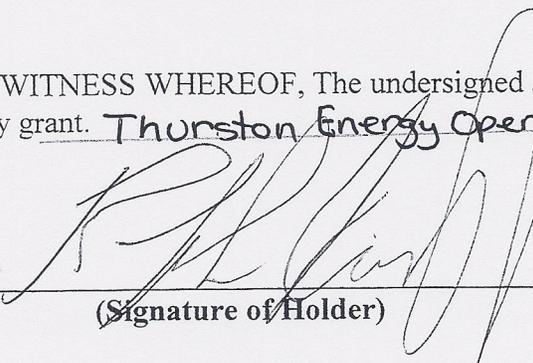
- do not situate the pump in a low-flow or no-flow area as these habitats tend to concentrate larval fishes;
- limit the amount of pumping, to the greatest extent possible, during that period of the year when larval fish may be present (see above); and
- limit the amount of pumping, to the greatest extent possible, during the pre-dawn hours as larval drift studies indicate that this is a period of greatest daily activity.

Screen all pump intakes with 3/32" mesh material. Report any fish impinged on the intake screen to the Service (801.975.3330) and the Utah Division of Wildlife Resources:

Northeastern Region  
152 East 100 North, Vernal, UT 84078  
Phone: (435) 781-9453

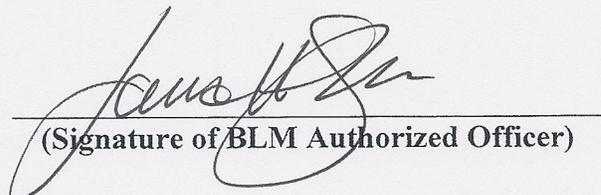
The lessee must move the production tanks upon completion between corners # 6 and 7. This mitigation measure will move the tanks further from the floodplain and help minimize the risk of contamination if a leak or spill were to occur.

IN WITNESS WHEREOF, The undersigned agrees to the terms and conditions of this right-of-way grant. Thurston Energy Operating Co.

By:   
\_\_\_\_\_  
(Signature of Holder)

President  
\_\_\_\_\_  
(Title)

November 1, 2010  
\_\_\_\_\_  
(Date)

  
\_\_\_\_\_  
(Signature of BLM Authorized Officer)

Acting Assistant Field Manager  
Lands & Mineral Resources  
\_\_\_\_\_  
(Title)

NOV 17 2010  
\_\_\_\_\_  
(Effective Date of Grant)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
**RIGHT-OF-WAY GRANT**

**UTU-85917**

1. A right-of-way is hereby granted pursuant to Section 28 of the Mineral Leasing Act of 1920, as amended (30 U.S.C. 185).

2. Nature of Interest:

a. By this instrument, the holder

Thurston Energy Operating Company  
2754 W. Hwy. 40  
P.O. Box 240  
Vernal, Utah 84078

receives a right to construct, operate, maintain, and terminate a surface laid, 3-inch, steel, natural gas pipeline on Federal lands within the following legal description:

Salt Lake Meridian  
T. 9 S., R. 24 E.,  
sec. 29, W $\frac{1}{2}$ NW $\frac{1}{4}$ , NW $\frac{1}{4}$ SW $\frac{1}{4}$ .

- b. The right-of-way area granted herein is 3200 feet in length and 15 feet in width consisting of 1.102 acres more or less.
- c. In case of a change of address, the holder shall immediately notify the authorized officer.
- d. This instrument shall terminate upon the expiration of the State Oil and Gas Lease ML-22161 or December 31, 2039, unless, prior thereto, it is relinquished, abandoned, terminated, or modified pursuant to the terms and conditions of this instrument or of any applicable Federal law or regulation.
- e. This instrument may be renewed. If renewed, the right-of-way shall be subject to the regulations existing at the time of renewal and any other terms and conditions that the authorized officer deems necessary to protect the public interest.
- f. Notwithstanding the expiration of this instrument or any renewal thereof, early relinquishment, abandonment, or termination, the provisions of this instrument, to

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the extent applicable, shall continue in effect and shall be binding on the holder, its successors, or assigns, until they have fully satisfied the obligations and/or liabilities accruing herein before or on account of the expiration, or prior termination, of the grant.

3. Rental:

- a. For and in consideration of the rights granted, the holder agrees to pay the Bureau of Land Management fair market value rental as determined by the authorized officer unless specifically exempted from such payment by regulation. Provided, however, that the rental may be adjusted by the authorized officer, whenever necessary, to reflect changes in the fair market rental value as determined by the application of sound business management principles, and so far as practicable and feasible, in accordance with comparable commercial practices.

BLM Vernal Field Office  
170 South 500 East  
Vernal, Utah 84078

4. Terms and Conditions:

- a. This grant or permit is issued subject to the holder's compliance with all applicable regulations contained in Title 43 Code of Federal Regulations part 2880.
- b. Upon grant termination by the authorized officer, all improvements shall be removed from the Federal lands within 182 days, or otherwise disposed of as provided in paragraph (4)(d) or as directed by the authorized officer.
- c. Each grant issued pursuant to the authority of paragraph (1) for a term of 20 years or more shall, at a minimum, be reviewed by the authorized officer at the end of the 20th year and at regular intervals thereafter not to exceed 10 years. Provided, however, that a right-of-way or permit granted herein may be reviewed at any time deemed necessary by the authorized officer.
- d. The stipulations, map set forth as Exhibit A, and dated May 25, 2006, and attached hereto, are incorporated into and made a part of this grant instrument as fully and effectively as if they were set forth herein in its entirety.
- e. Failure of the holder to comply with applicable law or any provision of this right-of-way grant or permit shall constitute grounds for suspension or termination thereof.
- f. The holder shall perform all operations in a good and workmanlike manner so as to ensure protection of the environment and the health and safety of the public.

- g. Use of pesticides shall comply with the applicable Federal and state laws. Pesticides shall be used only in accordance with their registered uses and within limitations imposed by the Secretary of the Interior. Prior to the use of pesticides, the holder shall obtain from the authorized officer written approval of a plan showing the type and quantity of material to be used, pest(s) to be controlled, method of application, location of storage and disposal of containers, and any other information deemed necessary by the authorized officer. Emergency use of pesticides shall be approved in writing by the authorized officer prior to such use.
- h. The holder of this right-of-way grant or the holder's successor in interest shall comply with Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000D et seq.) and the regulations of the Secretary of the Interior issued pursuant thereto.
- i. The holder shall comply with the construction practices and mitigating measures established by 33 CFR 323.4, which sets forth the parameters of the nationwide permit required by Section 404 of the Clean Water Act. If the proposed action exceeds the parameters of the nationwide permit, the holder shall obtain an individual permit from the appropriate office of the Army Corps of Engineers and provide the authorized officer with a copy of same. Failure to comply with this requirement shall be cause for suspension or termination of this right-of-way grant.
- j. Holder shall maintain the right-of-way in a safe, usable, and sanitary condition as directed by the authorized officer. Waste material at those sites shall be disposed of promptly at an approved waste disposal site. "Waste", as used in this paragraph, shall mean all discarded matter of any kind.
- k. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on Federal or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.
- l. The holder shall be responsible for noxious weed control on disturbed areas within the limits of the right-of-way. The holder is responsible to pressure wash all vehicles and equipment entering the project area.
- m. The holder shall protect all survey monuments found within the right-of-way. Survey monuments include, but are not limited to, General Land Office and Bureau of Land Management Cadastral Survey Corners, reference corners, witness points, U.S. Coastal and Geodetic benchmarks and triangulation stations,

military control monuments, and recognizable civil (both Federal and private) survey monuments. In the event of obliteration or disturbance of any of the above, the holder shall immediately report the incident, in writing, to the authorized officer. Where General Land Office or Bureau of Land Management right-of-way monuments or references are obliterated during operations, the holder shall secure the services of a registered land surveyor or a Bureau cadastral surveyor to restore the disturbed monuments and references using surveying procedures found in the Manual of Surveying Instructions for the Survey of the Federal Lands in the United States, latest edition. The holder shall record such survey in the appropriate county and send a copy to the authorized officer. If the Bureau cadastral surveyors or other Federal surveyors are used to restore the disturbed survey monument, the holder shall be responsible for the survey cost.

- n. Every reasonable effort will be made to prevent, control, or suppress any fire in the operation area. Uncontrolled fires must be immediately reported to the BLM Vernal Field Office.
- o. The Holder shall comply with all applicable local, state, and federal air, water, hazardous substance, solid waste, or other environmental laws and regulations, existing or hereafter enacted or promulgated. To the full extent permissible by law, the Holder agrees to indemnify and hold harmless, within the limits, if any, established by state law (as state law exists on the effective date of the right-of-way/lease), the United States against any liability arising from the holder's use or occupancy of the right-of way/lease area, regardless of whether the holder has actually developed or caused development to occur on the right-of-way/lease area, from the time of the issuance of this right-of-way/lease to the holder, and during the term of this right-of-way/lease. This agreement to indemnify and hold harmless the United States against any liability shall apply without regard to whether the liability is caused by the holder, its agents, contractors, or third parties. If the liability is caused by third parties, the holder will pursue legal remedies against such third parties, as if the holder were the fee owner of the right-of-way/lease area.

Notwithstanding any limits to the holder's ability to indemnify and hold harmless the United States which may exist under state law, the holder agrees to bear all responsibility (financial or other) for any and all liability or responsibility of any kind or nature assessed against the United States, arising from the holder's use or occupancy of the right-of way/lease area, regardless of whether the holder has actually developed or caused development to occur on the right-of-way/lease area, from the time of the issuance of this right-of-way/lease to the holder, and during the term of this right-of-way/lease.

- p. No hazardous material, substance, or hazardous waste, (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, *et seq.*, or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, *et seq.*) shall be used, produced, transported, released, disposed

of, or stored within the right-of-way/lease area at any time by the holder. The Holder shall immediately report any release of hazardous substances (leaks, spills, etc.), caused by the holder or third parties, in excess of the reportable quantity as required by federal, state, or local laws and regulations. A copy of any report required or requested by any federal, state or local government agency as a result of a reportable release or spill of any hazardous substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved federal, state or local government agency.

The holder shall immediately notify the Authorized Officer of any release of hazardous substances, toxic substances, or hazardous waste on or near the right-of-way/lease area, potentially affecting the right-of-way/lease area, of which the Holder is aware.

As required by law, holder shall have responsibility for and shall take all action(s) necessary to fully remediate and address the hazardous substance(s) on or emanating from the right-of way/lease area.

- q. The grant will be issued subject to all valid and existing rights.
- r. A copy of the complete right-of-way grant, including all stipulations and approved plan of development, shall be made available on the right-of-way area during construction, operation, and termination to the authorized officer. Noncompliance with the above will be grounds for an immediate temporary suspension of activities if it constitutes a threat to public health and safety or the environment.
- s. In the event that the public land underlying the right-of-way (ROW) encompassed in this grant, or a portion thereof, is conveyed out of Federal ownership and administration of the ROW or the land underlying the ROW is not being reserved to the United States in the patent/deed and/or the ROW is not within a ROW corridor being reserved to the United States in the patent/deed, the United States waives any right it has to administer the right-of-way, or portion thereof, within the conveyed land under Federal laws, statutes, and regulations, including the regulations at 43 CFR Part 2880, including any rights to have the holder apply to BLM for amendments, modifications, or assignments and for BLM to approve or recognize such amendments, modifications, or assignments. At the time of conveyance, the patentee/grantee, and their successors and assigns, shall succeed to the interests of the United States in all matters relating to the right-of-way, or portion thereof, within the conveyed land and shall be subject to applicable State and local government laws, statutes, and ordinances. After conveyance, any disputes concerning compliance with the use and terms and conditions of the ROW shall be considered a civil matter between the patentee/grantee and the ROW holder.
- t. Holder shall give immediate notice of any such discharge to the authorized officer and such other Federal and State officials as are required by law to be given such

notice.

- u. If during any phase of the construction, operation, or termination of the pipeline or related facilities any oil or other pollutant should be discharged from the pipeline system, or from containers or vehicles impacting Federal lands, the control and total removal, disposal and cleanup of such oil or other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of holder to control, cleanup, or dispose of such discharge on or affecting Federal lands, or to repair all damages to Federal lands, resulting therefrom, the authorized officer may take such measures as he deems necessary to control and cleanup the discharge and restore the area, including where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the authorized officer shall not relieve the holder of any liability or responsibility.
- v. The holder shall be entitled to utilize excess width totaling 15 feet (7.5 feet on each side) of the permanent right-of-way on the above described lands for construction purposes only. Surface disturbing activities on this acreage may occur upon grant issuance for a period of ninety days. Any additional time needed for construction purposes will require the holder to notify this office and obtain approval for additional time and rental, if applicable. Noncompliance with the above terms and conditions will be grounds for an immediate temporary suspension of activities if it constitutes a threat to Federal health and safety or the environment.
- w. No surface disturbing activities shall take place on the subject right-of-way until the associated APD is approved. The holder will adhere to the surface use plan, any special stipulations, and/or conditions of approval attached to the APD, relevant to any right-of-way facilities.
- x. Following completion of the access road and well location, grantee will have 60 days to submit an "as built", survey map or shapefile in a form acceptable to the authorized officer, showing the new centerline.
- y. The holder shall contact the authorized officer at least 48 hours prior to the anticipated start of reclamation activities. The authorized officer may require and schedule a pre-reclamation conference with the holder prior to the holder's commencing of reclamation activities on the right-of-way. The holder and/or his representative shall attend this conference. The holder's contractor, or agents involved with reclamation activities associated with the right-of-way, shall also attend this conference to review the stipulations of the grant, including the plan of development and/or reclamation plan. Please contact the BLM Vernal Field Office at 435-781-4400 and ask for a member of the Reclamation Team or Realty Staff regarding the pre-reclamation conference.

z. Livestock Grazing Mitigation.

Negative impacts to the existing reservoir should be avoided. If reservoir is silted in, coordination between operator, BLM, and range permittee for cleaning would be desirable.

aa. Vegetation including Invasive Plants and Noxious Weeds Mitigation

- A pre-project inventory for Utah noxious weeds shall be conducted prior to the beginning of surface disturbing activities and results reported to the BLM Weed Coordinator prior to surface disturbance occurring.
- All vehicles and equipment that was previously operated outside the Uinta Basin shall be power-washed.
- In areas where noxious weeds are already present, all vehicles and equipment shall be power-washed before moving to a new project area.
- Certified noxious weed free seed and mulch shall be used in all reclamation.
- Weeds shall be controlled within the disturbance area.
- All disturbance areas shall be monitored for noxious weeds **annually**, for a minimum of three growing seasons following completion of project or until desirable vegetation is established.
- A Pesticide Use Proposal shall be submitted and approved prior to chemical weed control on BLM lands.

bb. Colorado River Fish Species Mitigation:

The best method to avoid entrainment is to pump from an off-channel location – one that does not connect to the river during high spring flows. An infiltration gallery constructed in a BLM and Service approved location is best.

If the pump head is located in the river channel where larval fish are known to occur, the following measures apply:

- do not situate the pump in a low-flow or no-flow area as these habitats tend to concentrate larval fishes;
- limit the amount of pumping, to the greatest extent possible, during that period of the year when larval fish may be present (see above); and
- limit the amount of pumping, to the greatest extent possible, during the pre-dawn hours as larval drift studies indicate that this is a period of greatest daily activity.

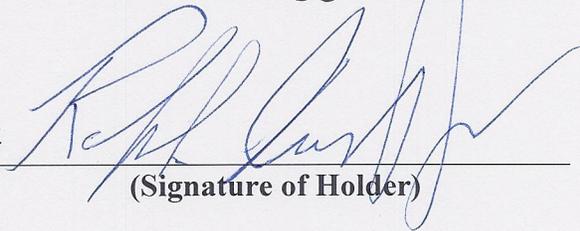
Screen all pump intakes with 3/32" mesh material. Report any fish impinged on the intake screen to the Service (801.975.3330) and the Utah Division of Wildlife Resources:

Northeastern Region  
152 East 100 North, Vernal, UT 84078  
Phone: (435) 781-9453

The lessee must move the production tanks upon completion between corners # 6 and 7. This mitigation measure will move the tanks further from the floodplain and help minimize the risk of contamination if a leak or spill were to occur.

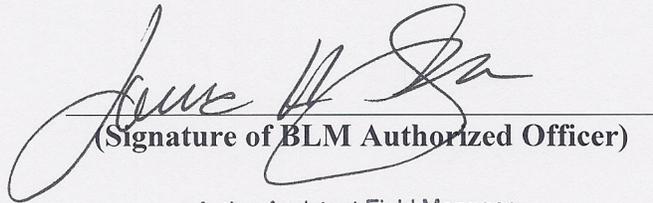
IN WITNESS WHEREOF, The undersigned agrees to the terms and conditions of this right-of-way grant.

Thurston Energy Operating Co.

By:   
\_\_\_\_\_  
(Signature of Holder)

President  
\_\_\_\_\_  
(Title)

November 1, 2010  
\_\_\_\_\_  
(Date)

  
\_\_\_\_\_  
(Signature of BLM Authorized Officer)

Acting Assistant Field Manager  
Lands & Mineral Resources  
\_\_\_\_\_  
(Title)

NOV 17 2010  
\_\_\_\_\_  
(Effective Date of Grant)

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> ML-22161
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<b>2. NAME OF OPERATOR:</b> THURSTON ENERGY OPERATING	<b>9. API NUMBER:</b> 43047406280000
<b>3. ADDRESS OF OPERATOR:</b> 365 W. 50 N. Ste W-8 , Vernal, UT, 84078	<b>PHONE NUMBER:</b> 214 704-3896 Ext
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11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 7/31/2011  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input checked="" type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>

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

Due to weather conditions and rig availability we request this one year extension.

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

Date: 03/15/2011  
By: 

<b>NAME (PLEASE PRINT)</b> Russell H. Cox	<b>PHONE NUMBER</b> 435 789-8580	<b>TITLE</b> Operations Manager
<b>SIGNATURE</b> N/A	<b>DATE</b> 3/8/2011	



**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 43047406280000**

**API:** 43047406280000

**Well Name:** THURSTON 12-29-9-24

**Location:** 1973 FSL 0656 FWL QTR NWSW SEC 29 TWP 090S RNG 240E MER S

**Company Permit Issued to:** THURSTON ENERGY OPERATING

**Date Original Permit Issued:** 6/16/2010

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.

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

**Signature:** Russell H. Cox

**Date:** 3/8/2011

**Title:** Operations Manager **Representing:** THURSTON ENERGY OPERATING

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> ML-22161																														
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<b>NAME (PLEASE PRINT)</b> Russell H. Cox		<b>PHONE NUMBER</b> 435 789-8580																														
<b>SIGNATURE</b> N/A		<b>TITLE</b> Operations Manager																														
<b>DATE</b> 5/11/2011		<b>FOR RECORD ONLY</b>																														

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<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 7/5/2011  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input checked="" type="checkbox"/> OTHER	
	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input type="text" value="spud well"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.		
Please be advised that Thurston Energy Operating Company is planning to spud the Thurston 12-29-9-24 well. Rig is currently moving on location and setting up for drilling.		
<b>Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY</b>		
<b>NAME (PLEASE PRINT)</b> Patti Cox	<b>PHONE NUMBER</b> 435 789-8580	<b>TITLE</b> Business Manager
<b>SIGNATURE</b> N/A	<b>DATE</b> 7/5/2011	

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> ML-22161
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> THURSTON ENERGY OPERATING		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>3. ADDRESS OF OPERATOR:</b> 365 W. 50 N. Ste W-8 , Vernal, UT, 84078		<b>8. WELL NAME and NUMBER:</b> THURSTON 12-29-9-24
<b>4. LOCATION OF WELL FOOTAGES AT SURFACE:</b> 1973 FSL 0656 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSW Section: 29 Township: 09.0S Range: 24.0E Meridian: S		<b>9. API NUMBER:</b> 43047406280000
<b>PHONE NUMBER:</b> 214 704-3896 Ext		<b>9. FIELD and POOL or WILDCAT:</b> DEVILS PLAYGROUND
<b>COUNTY:</b> UINTAH		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> ALTER CASING	
<input checked="" type="checkbox"/> SPUD REPORT Date of Spud: 7/5/2011	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
	<input type="checkbox"/> CHANGE TUBING	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> PLUG AND ABANDON	
	<input type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input type="checkbox"/> OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. Please be advised that the Thurston 12-29-9-24 well was spudded at 2:45 p.m. on July 5, 2011.		
<b>Accepted by the          Utah Division of          Oil, Gas and Mining          FOR RECORD ONLY</b>		
<b>NAME (PLEASE PRINT)</b> Patti Cox	<b>PHONE NUMBER</b> 435 789-8580	<b>TITLE</b> Business Manager
<b>SIGNATURE</b> N/A	<b>DATE</b> 7/5/2011	

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> ML-22161
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>  <b>7. UNIT or CA AGREEMENT NAME:</b>
<b>1. TYPE OF WELL</b> Gas Well	<b>8. WELL NAME and NUMBER:</b> THURSTON 12-29-9-24
<b>2. NAME OF OPERATOR:</b> THURSTON ENERGY OPERATING	<b>9. API NUMBER:</b> 43047406280000
<b>3. ADDRESS OF OPERATOR:</b> 365 W. 50 N. Ste W-8 , Vernal, UT, 84078	<b>PHONE NUMBER:</b> 214 704-3896 Ext
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1973 FSL 0656 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSW Section: 29 Township: 09.0S Range: 24.0E Meridian: S	<b>9. FIELD and POOL or WILDCAT:</b> DEVILS PLAYGROUND  <b>COUNTY:</b> UINTAH  <b>STATE:</b> UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 7/11/2011	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:	<input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 50px;" type="text"/>

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

Thurston Energy Operating Company requests a change in our approved APD for the Thurston 12-29-9-24. Approved APD was for total depth of 8,000' and we would request a change to total depth of 6,000'. Also we request approval to lower BOP test from 2,000# to 1,500# pressure.

**REQUEST DENIED**  
**Utah Division of**  
**Oil, Gas and Mining**

**Date:** 07/20/2011  
**By:** *Derek Quist*

<b>NAME (PLEASE PRINT)</b> Patti Cox	<b>PHONE NUMBER</b> 435 789-8580	<b>TITLE</b> Business Manager
<b>SIGNATURE</b> N/A	<b>DATE</b> 7/8/2011	

Please Review Attached Reasons for Denial

RECEIVED Jul. 08, 2011



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

- State of Utah
- Department of Natural Resources

**Electronic Permitting System - Sundry Notices**

**Sundry Conditions of Approval Well Number 43047406280000**

**Approval is granted to 8000', operator can only drill to 6000' if desired. However, the surface casing should be tested to 2000 psi as specified in rule R649-3-7. This rule states that the BOPE, including casing should be tested to 70% internal yield, full manufacturers working pressure or 1 psi/ft of last casing string set, whichever is less. This equates to 2000 psi. Even at a depth of 6000' it could reasonably be expected to have 2000 psi on casing. The BOPE test should be to 2000 psi.**

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> ML-22161
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>1. TYPE OF WELL</b> Gas Well		<b>8. WELL NAME and NUMBER:</b> THURSTON 12-29-9-24
<b>2. NAME OF OPERATOR:</b> THURSTON ENERGY OPERATING		<b>9. API NUMBER:</b> 43047406280000
<b>3. ADDRESS OF OPERATOR:</b> 365 W. 50 N. Ste W-8 , Vernal, UT, 84078	<b>PHONE NUMBER:</b> 214 704-3896 Ext	<b>9. FIELD and POOL or WILDCAT:</b> DEVILS PLAYGROUND
<b>4. LOCATION OF WELL FOOTAGES AT SURFACE:</b> 1973 FSL 0656 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSW Section: 29 Township: 09.0S Range: 24.0E Meridian: S		<b>COUNTY:</b> UINTAH
		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 7/5/2011  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> ACIDIZE <input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	
	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.		
<p>Thurston Energy would request the following change in our approved APD for the Thurston 12-29-9-24 well. APD was submitted with production casing size of 4 1/2" N-80 11.6# and we would like to revise the drilling plan to use 5 1/2" 17# N-80 production casing. No other changes are proposed at this time.</p>		
		<p><b>Approved by the Utah Division of Oil, Gas and Mining</b></p> <p><b>Date:</b> 07/20/2011</p> <p><b>By:</b> <u><i>Dark K. Quist</i></u></p>
<b>NAME (PLEASE PRINT)</b> Patti Cox	<b>PHONE NUMBER</b> 435 789-8580	<b>TITLE</b> Business Manager
<b>SIGNATURE</b> N/A		<b>DATE</b> 7/5/2011

Well name:	<b>43047406280000 Thurston 12-29-9-24</b>	
Operator:	<b>Thurston Energy Operating Company</b>	
String type:	Production	Project ID: 43-047-40628-0000
Location:	Uintah County, Utah	

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

Mud weight: 9.600 ppg  
Design is based on evacuated pipe.

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

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 75 °F  
Bottom hole temperature: 187 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 1,500 ft

Cement top: 3,909 ft

**Burst**

Max anticipated surface pressure: 2,230 psi  
Internal gradient: 0.220 psi/ft  
Calculated BHP 3,990 psi

No backup mud specified.

**Tension:**

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

Tension is based on air weight.  
Neutral point: 6,835 ft

Completion type is subs  
**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 <sup>3</sup> )
1	8000	5.5	17.00	N-80	LT&C	8000	8000	4.767	1044.2
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	3990	6290	1.577	3990	7740	1.94	136	348	2.56 J

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

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

Date: July 20, 2011  
Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 8000 ft, a mud weight of 9.6 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.

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

**RECEIVED** Jul. 05, 2011

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

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JUL 07 2011

FORM 6

DIV. OF OIL, GAS & MINING

ENTITY ACTION FORM

Operator: Thurston Energy Operating Company Operator Account Number: N 2790  
Address: 365 W. 50 N. Ste W-8  
city Vernal  
state UT zip 84078 Phone Number: (435) 789-8580

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304740628	Thurston 12-29-9-24		NWSW	29	9S	24E	Uintah
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
A	99999	18119	7/5/2011		7/20/11		
Comments: CS LGT = MVRD							<b>CONFIDENTIAL</b>

Well 2

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

Well 3

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

ACTION CODES:

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

Patti Cox

Name (Please Print)

Signature

Business Manager

Title

7/5/2011

Date

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

**CONFIDENTIAL**

AMENDED REPORT   
(highlight changes)

FORM 8

LEASE DESIGNATION AND SERIAL NUMBER:  
ML-22161

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  OTHER \_\_\_\_\_

b. TYPE OF WORK: NEW WELL  HORIZ. LATS.  DEEP-EN  RE-ENTRY  DIFF. RESVR.  OTHER \_\_\_\_\_

2. NAME OF OPERATOR:  
Thurston Energy Operating Company

3. ADDRESS OF OPERATOR: 365 West 50 North CITY Vernal STATE UT ZIP 84078 PHONE NUMBER: 435-789-8580

4. LOCATION OF WELL (FOOTAGES)  
AT SURFACE: 1973 FSL 0656 FWL  
AT TOP PRODUCING INTERVAL REPORTED BELOW:  
AT TOTAL DEPTH:

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT or CA AGREEMENT NAME

8. WELL NAME and NUMBER:  
12-29-9-24

9. API NUMBER:  
4304740628

10. FIELD AND POOL, OR WILDCAT  
DEVILS PLAYGROUND

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:  
NWSW 29 09. 24 S

12. COUNTY Uintah 13. STATE UTAH

14. DATE SPUDDED: 7/5/2011 15. DATE T.D. REACHED: 7/18/2011 16. DATE COMPLETED: 9/26/2011 ABANDONED  READY TO PRODUCE

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

18. TOTAL DEPTH: MD 6025 TVD 6025

19. PLUG BACK T.D.: MD TVD

20. IF MULTIPLE COMPLETIONS, HOW MANY? \*

21. DEPTH BRIDGE MD PLUG SET: TVD

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)  
SPECTRAL DENSITY/DUAL SPACED NEUTRON ARRAY COMPENSATED/TRUE RESISTIVITY

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

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

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED
17 3/4	14		0	60				SURFACE	
12 1/4	8 5/8 J55	36	0	1977		935		SURFACE	
7 7/8	5 1/2 N80	17	0	6013		LP 170		SURFACE	
						POZ 510			

25. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 3/8	4735							

26. PRODUCING INTERVALS

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)
(A) GREEN RIVER	3109	3120	3109	3120
(B) GREEN RIVER	3310	3316	3310	3316
(C) GREEN RIVER	3385	3341	3385	3341
(D) WASATCH	4711	4716	4711	4716

27. PERFORATION RECORD

INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
3109 3119	10	40	Open <input type="checkbox"/> Squeezed <input checked="" type="checkbox"/>
3310 3316	6	24	Open <input type="checkbox"/> Squeezed <input checked="" type="checkbox"/>
3385 3397	12	48	Open <input type="checkbox"/> Squeezed <input checked="" type="checkbox"/>
4711 4716	5	20	Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/>

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

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
3109-3119	24 BBLs. CEMENT
3310-3316	10 BBLs. CEMENT
3385-3397	20 BBLs. CEMENT

29. ENCLOSED ATTACHMENTS:

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

30. WELL STATUS:  
producing

**RECEIVED**

31. INITIAL PRODUCTION

INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED: 8/31/11		TEST DATE: 8/31/11		HOURS TESTED: 3		TEST PRODUCTION RATES: →	OIL - BBL: 0	GAS - MCF: 0	WATER - BBL: 53	PROD. METHOD: swab
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL - BBL: 0	GAS - MCF: 0	WATER - BBL: 161	INTERVAL STATUS: squeezed

INTERVAL B (As shown in item #26)

DATE FIRST PRODUCED: 9/6/11		TEST DATE: 9/6/11		HOURS TESTED: 3		TEST PRODUCTION RATES: →	OIL - BBL: 0	GAS - MCF: 0	WATER - BBL: 19	PROD. METHOD: swab
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL - BBL: 0	GAS - MCF: 0	WATER - BBL: 20.6	INTERVAL STATUS: squeezed

INTERVAL C (As shown in item #26)

DATE FIRST PRODUCED: 8/10/2011		TEST DATE: 8/10/2011		HOURS TESTED: 7		TEST PRODUCTION RATES: →	OIL - BBL: 0	GAS - MCF: 0	WATER - BBL: 254	PROD. METHOD: swab
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL - BBL: 0	GAS - MCF: 0	WATER - BBL: 497	INTERVAL STATUS: squeezed

INTERVAL D (As shown in item #26)

DATE FIRST PRODUCED: 9/26/11		TEST DATE: 9/26/11		HOURS TESTED: 12		TEST PRODUCTION RATES: →	OIL - BBL: 0	GAS - MCF: 1048	WATER - BBL: 8	PROD. METHOD: flowing
CHOKE SIZE: 25	TBG. PRESS. 1400	CSG. PRESS. 1700	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL - BBL: 0	GAS - MCF: 858	WATER - BBL: 12	INTERVAL STATUS: producing

32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

sold- Anadarko

33. SUMMARY OF POROUS ZONES (Include Aquifers):

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

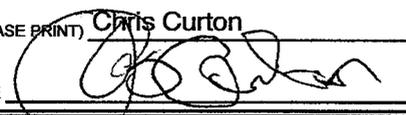
34. FORMATION (Log) MARKERS:

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
Green River	3109	3119	water	Gree River Wasatch Mesa Verde	2750 4074 5720
Green River	3310	3316	tight, no water, no oil, no gas		
Green River	3385	3341	water		
Wasatch	4711	4716	Gas,		

35. ADDITIONAL REMARKS (Include plugging procedure)

had circulation problems thru the birds nest

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

NAME (PLEASE PRINT) Chris Curton TITLE V.P. of Business development  
 SIGNATURE  DATE 9/29/11

This report must be submitted within 30 days of

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

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

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

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





Effective Date: 9/10/2014

<b>FORMER OPERATOR:</b> Thurston Energy Operating Company P.O. Box 1667 Vernal, UT 84078	<b>NEW OPERATOR:</b> Shiny One Operating Company, LLC P.O. Box 1667 Vernal, UT 84078
CA Number(s):	Unit(s):

**WELL INFORMATION:**

Well Name	Sec	TWN	RNG	API	Entity	Mineral	Surface	Type	Status
See attached list									

**OPERATOR CHANGES DOCUMENTATION:**

- Sundry or legal documentation was received from the **FORMER** operator on: 12/10/2014
- Sundry or legal documentation was received from the **NEW** operator on: 12/10/2015
- New operator Division of Corporations Business Number: 5917957-0161

**REVIEW:**

- Surface Agreement Sundry from **NEW** operator on Fee Surface wells received on: N/A
- Receipt of Acceptance of Drilling Procedures for APD on: N/A
- Reports current for Production/Disposition & Sundries: 1/4/2015
- OPS/SI/TA well(s) reviewed for full cost bonding: 1/4/2015
- UIC5 on all disposal/injection/storage well(s) approved on: N/A
- Surface Facility(s) included in operator change: N/A
- Inspections of PA state/fee well sites complete on (only upon operators request): N/A

**NEW OPERATOR BOND VERIFICATION:**

- Federal well(s) covered by Bond Number: UTB000181
- Indian well(s) covered by Bond Number:
- State/fee well(s) covered by Bond Number(s):  
579-146262-4  
579-146263-2  
579-146264-0  
579-146265-7

**DATA ENTRY:**

- Well(s) update in the **OGIS** on: 1/4/2015
- Entity Number(s) updated in **OGIS** on: 1/4/2015
- Unit(s) operator number update in **OGIS** on: N/A
- Surface Facilities update in **OGIS** on: N/A
- State/Fee well(s) attached to bond(s) in **RBDMS** on: 1/4/2015
- Surface Facilities update in **RBDMS** on: N/A

**LEASE INTEREST OWNER NOTIFICATION:**

- The **NEW** operator of the Fee (Mineral) wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: 1/4/2015

**COMMENTS:**

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From: Thurston Energy Operating N2790  
 To: Shiny One Operating Company, LLC N4185

Effective 10 September 2014

Well Name	Section	TWN	RNG	API	Entity	Mineral	Surface	Type	Status
RED WASH FED 1-18	18	090S	240E	4304730124	6200	Federal	Federal	GW	P
DEVILS PLAYGROUND 41-9	9	090S	240E	4304730339	6195	Federal	Federal	OW	P
DIRTY DEVIL FEDERAL 23-20	20	090S	240E	4304731009	10698	Federal	Federal	GW	P
DIRTY DEVIL 22X-27	27	090S	240E	4304734825	15109	Federal	Federal	GW	P
THURSTON 7-9-9-24 GR	9	090S	240E	4304740625	17771	Federal	Federal	OW	P
THURSTON 10-15-9-24	15	090S	240E	4304740626	17773	State	Federal	GW	P
THURSTON 12-29-9-24	29	090S	240E	4304740628	18119	State	Federal	GW	P
THURSTON 8-9-9-24	9	090S	240E	4304751428	18135	Federal	Federal	OW	P
DEVILS PLAYGROUND 23-17	17	090S	240E	4304730568	6136	Federal	Federal	GW	S
DIRTY DEVIL UNIT 11-29	29	090S	240E	4304731617	9586	State	Fee	GW	S
THURSTON 5-15-9-24	15	090S	240E	4304740627	17772	State	Federal	GW	S

# Delaware

The First State

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SEP 30 2014  
PAGE 1  
Div. of Oil, Gas & Mining

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF AMENDMENT OF "THURSTON ENERGY OPERATING COMPANY, LLC", CHANGING ITS NAME FROM "THURSTON ENERGY OPERATING COMPANY, LLC" TO "SHINY ONE OPERATING COMPANY, LLC", FILED IN THIS OFFICE ON THE TWENTY-FIRST DAY OF AUGUST, A.D. 2014, AT 3:24 O'CLOCK P.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE EFFECTIVE DATE OF THE AFORESAID CERTIFICATE OF AMENDMENT IS THE TENTH DAY OF SEPTEMBER, A.D. 2014.

3972888 8100

141350778



You may verify this certificate online  
at [corp.delaware.gov/authver.shtml](http://corp.delaware.gov/authver.shtml)

  
Jeffrey W. Bullock, Secretary of State  
AUTHENTICATION: 1824738

DATE: 10-30-14

**STATE OF DELAWARE  
CERTIFICATE OF AMENDMENT**

1. Name of Limited Liability Company: Thurston Energy Operating Company, LLC
2. The Certificate of Formation of the limited liability company is hereby amended as follows:

The name of Thurston Energy Operating Company, LLC shall be changed to Shiny One Operating Company, LLC, to be effective September 10, 2014.

IN WITNESS WHEREOF, the undersigned have executed this Certificate on the 20 day of August, A.D. 2014.

By:

Crystal Meeks  
Authorized Person(s)

Name: Crystal Meeks - Manager

Print or Type

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

FORM 9

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

1. TYPE OF WELL: OIL WELL  GAS WELL  OTHER \_\_\_\_\_

2. NAME OF OPERATOR: Sting One Operating Company, LLC

3. ADDRESS OF OPERATOR: CITY Vernal STATE UT ZIP 84079 PHONE NUMBER: 435-789-8580

4. LOCATION OF WELL: FOOTAGES AT SURFACE: \_\_\_\_\_ COUNTY: Uintah  
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: 29. 0905. 240 Q. 18119. State STATE: UTAH

5. LEASE DESIGNATION AND SERIAL NUMBER: \_\_\_\_\_

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: \_\_\_\_\_

7. UNIT or CA AGREEMENT NAME: \_\_\_\_\_

8. WELL NAME and NUMBER: THURSTON 12-29-9-24

9. API NUMBER: 4-305E+09

10. FIELD AND POOL, OR WILDCAT: \_\_\_\_\_

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

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

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

*Effective 9-10-14*

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JAN 10 2014

Div. of Oil, Gas & Mining

Thurston energy operating company shall be known as  
Sting one operating company, LLC

NAME (PLEASE PRINT) Crystal Meeks TITLE Assistant Manager  
SIGNATURE Crystal Meeks DATE 12-8-14

(This space for State use only)

APPROVED

JAN 04 2016

DIV. OF OIL, GAS & MINING -  
*Rachel Medina*