

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. U-31266
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name NA
2. Name of Operator Thurston Energy Operating Company		7. If Unit or CA Agreement, Name and No. NA
3a. Address 290 South 800 East Vernal, UT 84078	3b. Phone No. (include area code) 435-789-0968	8. Lease Name and Well No. Thurston 13-20-9-24
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface 649851 X 40.014535 At proposed prod. zone 856' FSL & 685' FWL SWSW - 109.244142		9. API Well No. 93-047-39775
14. Distance in miles and direction from nearest town or post office* 44.3 miles south of Vernal, UT		10. Field and Pool, or Exploratory Winters - Dennis Diagramed 575
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 685'	16. No. of acres in lease 1,594	11. Sec., T. R. M. or Blk. and Survey of Area Sec. 20 T9S. R24E
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1,400	19. Proposed Depth 8,000	12. County or Parish Uintah
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5368' GR	22. Approximate date work will start* 04/30/2006	13. State UT
20. BLM/BIA Bond No. on file Rotary		
23. Estimated duration 30 Days		

24. Attachments

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

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

25. Signature -- <i>Ginger Stringham</i>	Name (Printed/Typed) Ginger Stringham	Date 06/01/2007
Title Agent		

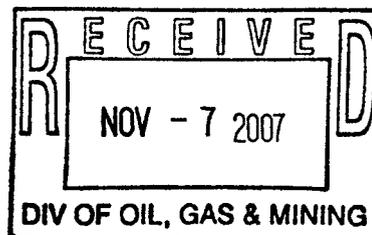
Approved by (Signature) <i>Bradley G. Hill</i>	Name (Printed/Typed) BRADLEY G. HILL	Date 11-08-07
Title ENVIRONMENTAL MANAGER	Office	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*(Instructions on page 2)

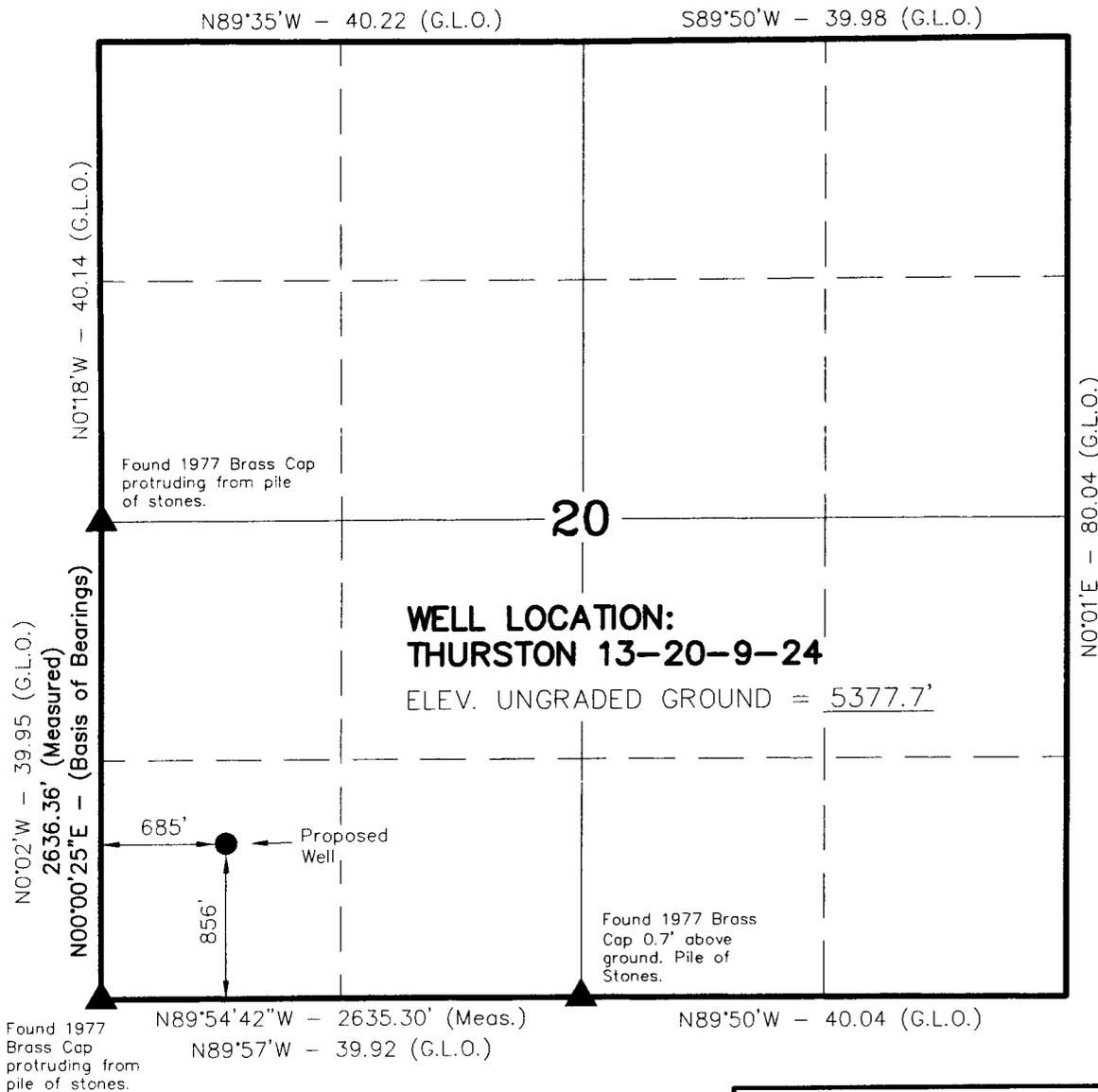
**Federal Approval of this
Action is Necessary**



T9S, R24E, S.L.B.&M.

THURSTON ENERGY OPERATING COMPANY

WELL LOCATION, THURSTON 13-20-9-24,
 LOCATED AS SHOWN IN THE SW 1/4 SW 1/4
 OF SECTION 20, T9S, R24E, S.L.B.&M. UINTAH
 COUNTY, UTAH.

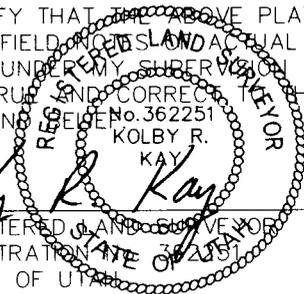


NOTES:

1. Well footages are measured at right angles to the Section Lines.
2. Bearings are based on Global Positioning Satellite observations.



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



▲ = SECTION CORNERS LOCATED

BASIS OF ELEVATION IS BENCH MARK 46 EAM LOCATED IN THE SW 1/4 OF SECTION 23, T9S, R24E, S.L.B.&M. THE ELEVATION OF THIS BENCH MARK IS SHOWN ON THE BONANZA 7.5 MIN. QUADRANGLE AS BEING 5550'.

THURSTON 13-20-9-24
 (Proposed Well Head)
 NAD 83 Autonomous
 LATITUDE = 40° 00' 59.4"
 LONGITUDE = 109° 14' 41.6"

TIMBERLINE LAND SURVEYING, INC.
 38 WEST 100 NORTH. - VERNAL, UTAH 84078
 (435) 789-1365

DATE SURVEYED: 10-19-05	SURVEYED BY: K.R.K.	SHEET 2 OF 10
DATE DRAWN: 10-29-05	DRAWN BY: J.R.S.	
SCALE: 1" = 1000'		Date Last Revised:

Self Certification Statement

The following self-certification statement is provided per Federal requirements dated June 15, 1988.

Please be advised that Thurston Energy Operating Company is considered to be the operator of the following well:

**Thurston 13-20-9-24
Section 20, T. 9S, R. 24E
SW ¼ SW ¼
Lease U-31266
Uintah County, UT**

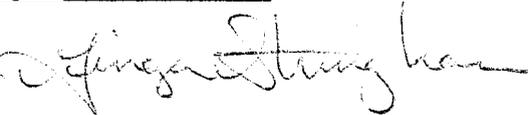
Thurston Energy Operating Company is responsible under the terms and conditions of the lease for the operations conducted upon the lease lands.

Bond UTB000181 provides state-wide bond coverage on all Federal Lands.

Date: 6/1/07

Name: Ginger Stringham

Title: Agent

Signature: 

1. **Surface Formation**

Green River

2. **Estimated Formation Tops and Datum:**

<u>Formation</u>		<u>Depth</u>	<u>Datum</u>
Green River		Surface	+5,369' G.L.
Birds Nest	Water	1,600	+3,769'
Wasatch	Oil/Gas	4,208	+1,161'
Mesaverda	Oil/Gas	5,948	-579'
TD		8,000	-2,631'

A 12 1/4" hole will be drilled to 2,000' +/- . The hole depth 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. All water and oil and gas bearing zones shall be protected by casing and cement program.

3. **Producing Formation Depth:**

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

4. **Proposed Casing:**

<u>Hole Size</u>	<u>Casing Size</u>	<u>Weight/FT</u>	<u>Grade</u>	<u>Coupling & Tread</u>	<u>Casing Depth</u>	<u>New/Used</u>
12 1/4"	9 5/8"	36#	J-55	STC	2000	NEW
7 7/8"	5 1/2"	17#	N-80	LTC	T.D.	NEW

Cement Program:

The Surface Casing will be cemented to the Surface as follows:

Note: Cement amounts shown with 50% excess.

<u>Casing Depth</u>	<u>Casing Size</u>	<u>Cement Type</u>	<u>Cement Amounts</u>	<u>Cement Yield</u>	<u>Water Mix</u>	<u>Cement Weight</u>
Lead: 0-1,600'	9 5/8	Premium "5" 16% Gel 10 #/sk Gilsonite 3% Salt 3 #/sk GB3 0.25 #/sk Flocele	197 sks. +/-	3.82ft ³ /sk	23	11.0 ppg
Tail: 1,600-2,000'	9 5/8	Class "G" 2% Calcium Chloride 0.25 #/sk Flocele	159 sks. +/-	1.18ft ³ /sk	5	15.6 ppg
Top Job:	9 5/8	Class "G" 4% Calcium Chloride 0.25 #/sk Flocele	10-200 sks. +/-	1.15ft ³ /sk	5	15.8 ppg

Production casing will be cemented to 1,800' or higher as follows:

Note: Tail should be 200' above the Wasatch.

Note: Cement amounts shown with 25% excess.

<u>Casing Depth</u>	<u>Casing Size</u>	<u>Cement Type</u>	<u>Cement Amounts</u>	<u>Cement Yield</u>	<u>Water Mix</u>	<u>Cement Weight</u>
Lead:						
1,800'-4,008'	5 ½	Premium Lite II 0.05 #/sk Static Free 0.25 #/sk Cello Flake 5 #/sk KOL Seal 0.005 gps FP-6L 8% Gel 0.5% R-3 0.5% FL-52	149 sks +/-	3.38ft ³ /sk	20.52	11.0 ppg
Tail:						
4,008-8,000'	5 ½	Class "G" 0.05% Static Free 10% NACL 0.1% R-3 2% Gel	660 sks +/-	1.31ft ³ /sk	5.91	14.3 ppg

5. BOP and Pressure Containment Data:

A 3000-psi WP BOP system as described in the BOP and Pressure Containment Data (attached) will be installed and maintained from the 9 5/8" surface casing. An upper kelly cock to the required pressure rating with a handle available shall be employed.

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:

<u>Interval</u>	<u>Mud weight lbs./gal.</u>	<u>Viscosity Sec./OT.</u>	<u>Fluid Loss MI/30 Mins.</u>	<u>Mud Type</u>
0-2000	Air/Clear Water	-----	No Control	Water/Gel
2000-T.D.	8.4-9.4	30-45	8-10	LSND water based mud system

Note: Mud weights may exceed 9.4 due to solids increasing at or near T.D. Increased weights are not required to control formation pressure. Operator will have on location sufficient mud and weight material to increase mud weight to 9.4 at any time while drilling the subject well. Visual mud monitoring incorporating pit level indicators shall be used.

7. Testing, Coring, Sampling and Logging:

- a) DST: None are anticipated.
- b) Coring: There is the possibility of sidewall coring.
- c) Mud Sampling: Every 10' from 2000' to T.D.
- d) Logging:

Type	Interval
DLL/SFL W/GR and SP	T.D. to Surf. Csg
FDC/CNL W/GR and CAL	T.D. to Surf. Csg

8. Abnormalities (including sour gas):

Based on off set wells anticipated bottom hole pressure will be less than 3000 psi. No abnormal pressures, temperatures or other hazards are anticipated. Other wells drilled in the area have not encountered over pressured zones or H2S.

9. Other facets of the proposed operation:

Off Set Well information:

Abandon Wells:

PTS Beehive #11-20

Shut in Well:

Dirty Devil Fed. #23-20

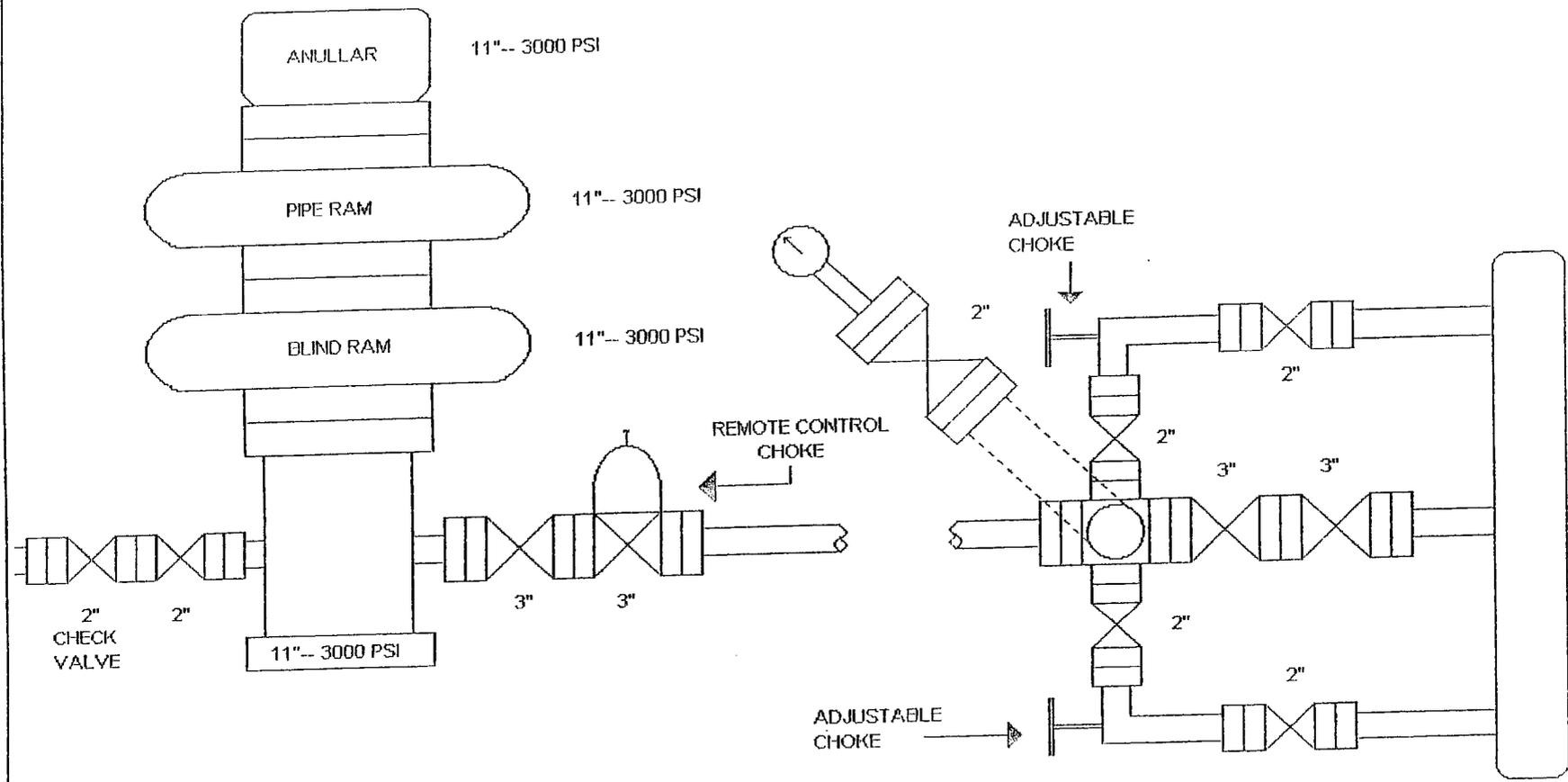
Dirty Devil Unit #11-29

Producing Wells:

Southman Cyn #2D-30

10. Drilling Schedule:

The anticipated starting date is 4/31/06. Duration of operations is expected to be 30 days.



THURSTON ENERGY OPERATING COMPANY

13 POINT SURFACE USE PLAN

FOR WELL

THURSTON 13-20-9-24

LOCATED IN SW $\frac{1}{4}$ SW $\frac{1}{4}$

SECTION 20, T.9S, R24E, S.L.B.&M.

UINTAH COUNTY, UTAH

LEASE NUMBER: U-31266

SURFACE OWNERSHIP: FEDERAL

1. Existing Roads:

**Thurston Energy Operating CO
Thurston #13-20-9-24
Sec. 20, 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. Exit right and proceed in a westerly direction along County B road 3410 approximately 4.2 miles to the junction of a County D road approximately 0.3 miles to the proposed access road; follow road flags in a southerly direction approximately 2,470 feet to the proposed location.

Total distance from Vernal, Utah to the proposed well location is approximately 43.0 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 2,470' of new construction on lease. The road will be graded once per year minimum and maintained.

- A) Approximate length 2470 ft
- B) Right-of-Way width 30 ft
- C) Running surface 18 ft
- D) Surface material Native soil
- E) Maximum grade 5%
- 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) Pipe line crossing One

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 Canyon 2D-30
- B) Water well None
- C) Abandoned well
PTS Beehive #11-20
- D) Temp. abandoned well None
- E) Disposal well None
- F) Drilling /Permitted well
Thurston #8-20-9-24
Thurston 13-19-9-24
SC 3-30-9-24
SC 1-30-9-24
SC 6-30
SC 8-30

SC 9-30
SC 7-30-9-24

- G) Shut in wells
 Dirty Devil Fed. #23-20
 Dirty Devil #11-29
- H) Injection well None
- I) Monitoring or observation well
 None

Please see the 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 plan 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 85' of 3" steel gas gathering surface pipeline would be constructed on Federal Lands. (Due to bedrock sandstone, shallow soils and a tie-in with a surface gathering system the line will not be buried.) The pipeline will tie into the existing pipeline in Sec 20, T9S, R24E. The pipeline will be strung and boomed to the northeast of the location.

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

An existing 8" pipeline will have to be re-routed for approximately 870'. The line will be taken out of service and blown down before it is moved. One 4" pipeline will have to be crossed. The line will be buried or covered with a half culvert.

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.

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.

5. Location and type of water supply

Water for drilling and cementing will come from a municipal tap at 355 South 1000 East Vernal, UT 84078.

B) Produced fluids:

Produced water will be confined to the reserve pit or, if deemed necessary, a storage tank will be used 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.

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.

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.

7. Methods for handling waste disposal

A) Pit construction and liners:

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 and none are foreseen for 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 21.1 ft
- G) Max fill 21.0 ft
- H) Total cut yds. 16,590 cu yds
- I) Pit location Southwest end
- J) Top soil location North & South ends
- K) Access road location Northeast 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 net 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 ground. The barbed wire shall be 3 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 reclaimed and 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:

6#/acre Needle & Thread Grass
6#/acre Crested Wheat Grass

11. Surface ownership:

Access road	Federal
Location	Federal
Pipe line	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 dwellings or other facilities within a one-mile radius of the location.

C) Archeology:

The location has been surveyed. A copy of that survey will be forwarded to your office.

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 4.5 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

Ginger Stringham
Paradigm Consulting
Vernal, UT 84078

Office 435-789-4162
Fax 435-789-8188
Cellular 435-790-4163

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. . This statement is subject to the provisions of 18 U.S.C. 1001 for filing of a false statement.



Ginger Stringham, Agent
Paradigm Consulting

Onsite Dates:

01/05/06

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, transported, disposed, or associated with the proposed action.

If you require additional information please contact:

William A Ryan
Agent for Thurston Energy Operating CO
290 S 800 E
Vernal, UT 84078

435-789-0968 Office
435-828-0968 Cell



PHOTO VIEW: FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: SOUTHEASTERLY

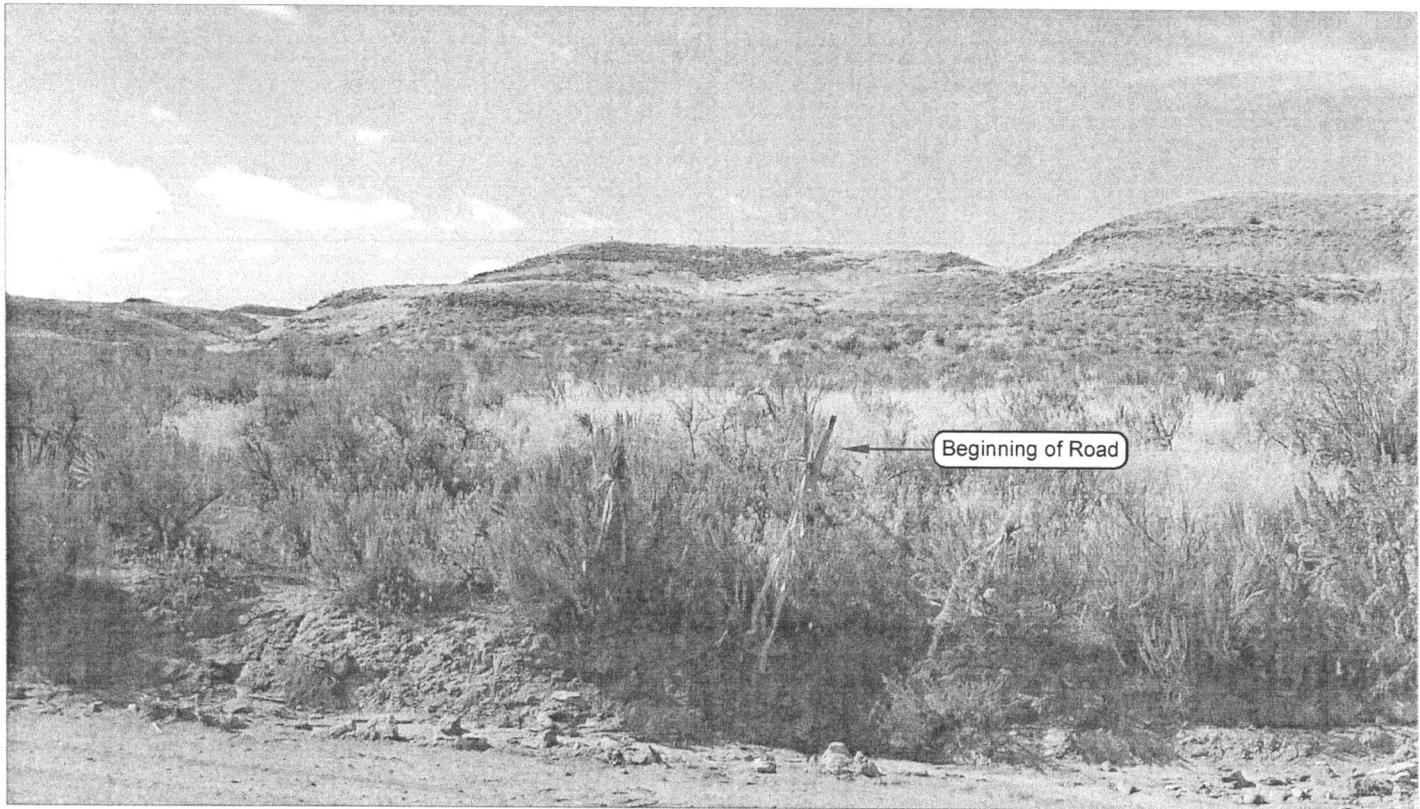


PHOTO VIEW: FROM BEGINNING OF PROPOSED ROAD

CAMERA ANGLE: SOUTHWESTERLY

THURSTON ENERGY OPERATING COMPANY

**Thurston 13-20-9-24
SECTION 20, T9S, R24E, S.L.B.&M.
856' FSL & 685' FWL**

LOCATION PHOTOS

TAKEN BY: K.R.K.

DRAWN BY: M.W.W.

DATE TAKEN: 10-19-05

DATE DRAWN: 11-01-05

REVISED:

Timberline Land Surveying, Inc.

38 West 100 North Vernal, Utah 84078
(435) 789-1365

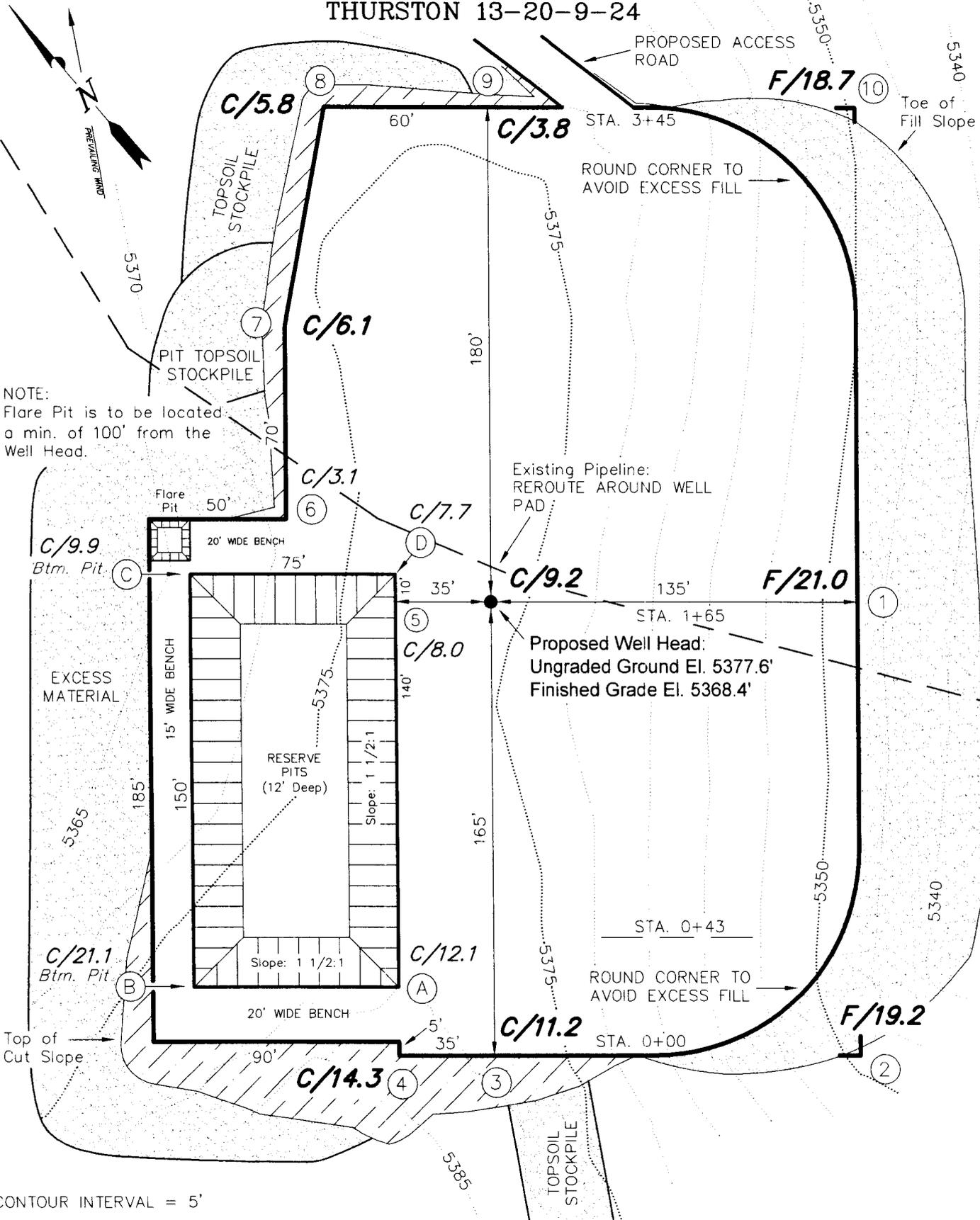
SHEET

1

OF 10

THURSTON ENERGY OPERATING COMPANY

CUT SHEET THURSTON 13-20-9-24



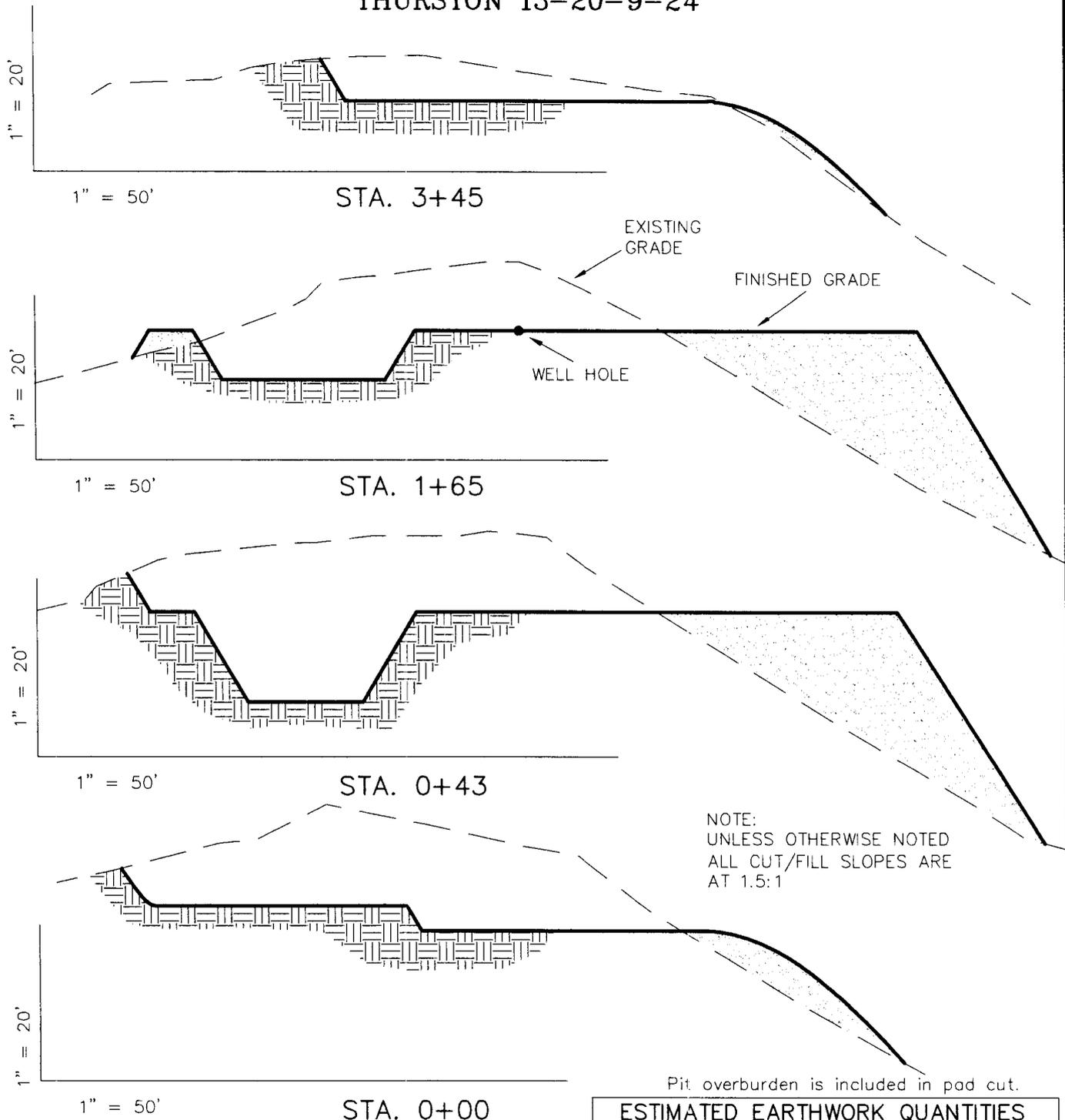
NOTE:
Flare Pit is to be located:
a min. of 100' from the
Well Head.

CONTOUR INTERVAL = 5'

Section 20, T9S, R24E, S.L.B.&M.		Qtr/Qtr Location: SW SW	Footage Location: 856' FSL & 685' FWL
Date Surveyed: 10-19-05	Date Drawn: 10-31-05	Date Last Revision:	Timberline (435) 789-1365 Land Surveying, Inc. 38 WEST 100 NORTH VERNAL, UTAH 84078
Surveyed By: K.R.K.	Drawn By: J.R.S.	Scale: 1" = 50'	
			SHEET 3 OF 10

THURSTON ENERGY OPERATING COMPANY

CROSS SECTIONS THURSTON 13-20-9-24



REFERENCE POINTS

185' SOUTHEASTERLY = 5337.4'
 235' SOUTHEASTERLY = 5329.3'
 215' SOUTHWESTERLY = 5382.9'
 265' SOUTHWESTERLY = 5388.2'

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

ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	13,250	14,920	Topsoil is not included in Pad Cut	-1,670
PIT	3,340	0		3,340
TOTALS	16,590	14,920	1,500	1,670

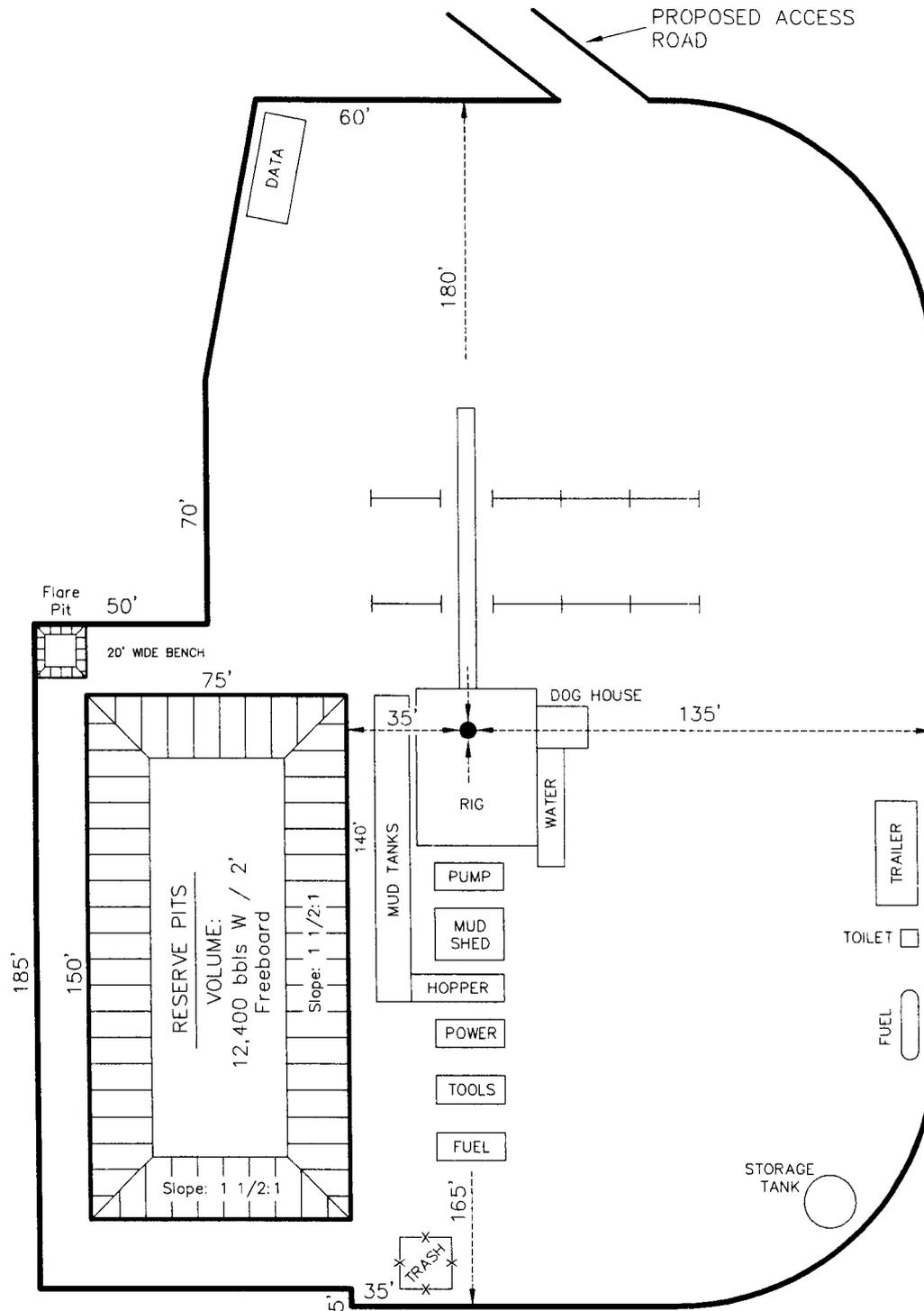
Excess Material after Pit Rehabilitation = 0 Cu. Yds.

Section 20, T9S, R24E, S.L.B.&M.		Qtr/Qtr Location: SW SW	Footage Location: 856' FSL & 685' FWL
Date Surveyed: 10-19-05	Date Drawn: 10-31-05	Date Last Revision:	Timberline (435) 789-1365 Land Surveying, Inc. 38 WEST 100 NORTH VERNAL, UTAH 84078
Surveyed By: K.R.K.	Drawn By: J.R.S.	Scale: 1" = 50'	
			SHEET 4 OF 10

THURSTON ENERGY OPERATING COMPANY

TYPICAL RIG LAYOUT

THURSTON 13-20-9-24

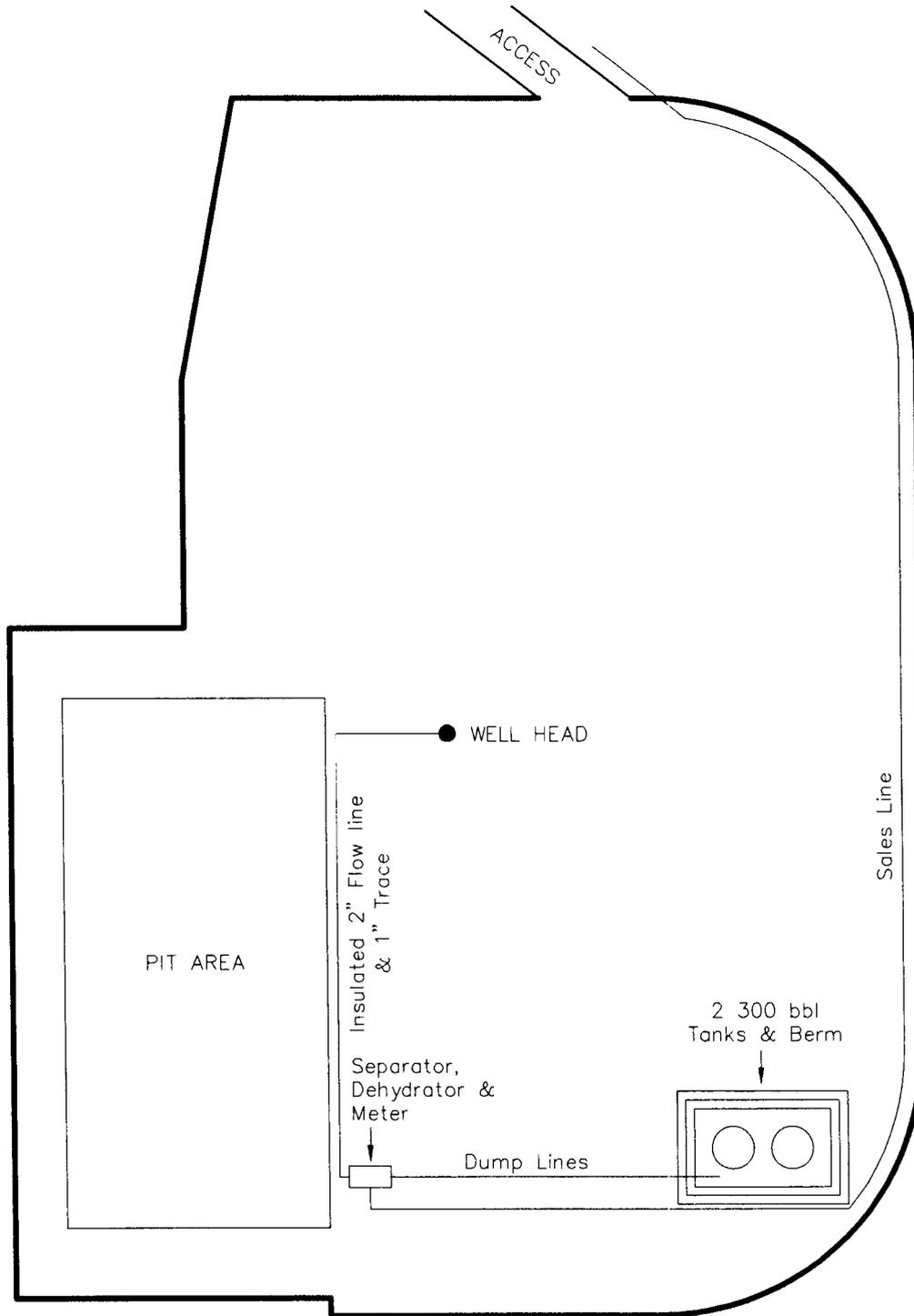


Section 20, T9S, R24E, S.L.B.&M.		Qtr/Qtr Location: SW SW	Footage Location: 856' FSL & 685' FWL
Date Surveyed: 10-19-05	Date Drawn: 10-31-05	Date Last Revision:	Timberline (435) 789-1365 Land Surveying, Inc. 38 WEST 100 NORTH VERNAL, UTAH 84078
Surveyed By: K.R.K.	Drawn By: J.R.S.	Scale: 1" = 50'	
			SHEET 5 OF 10

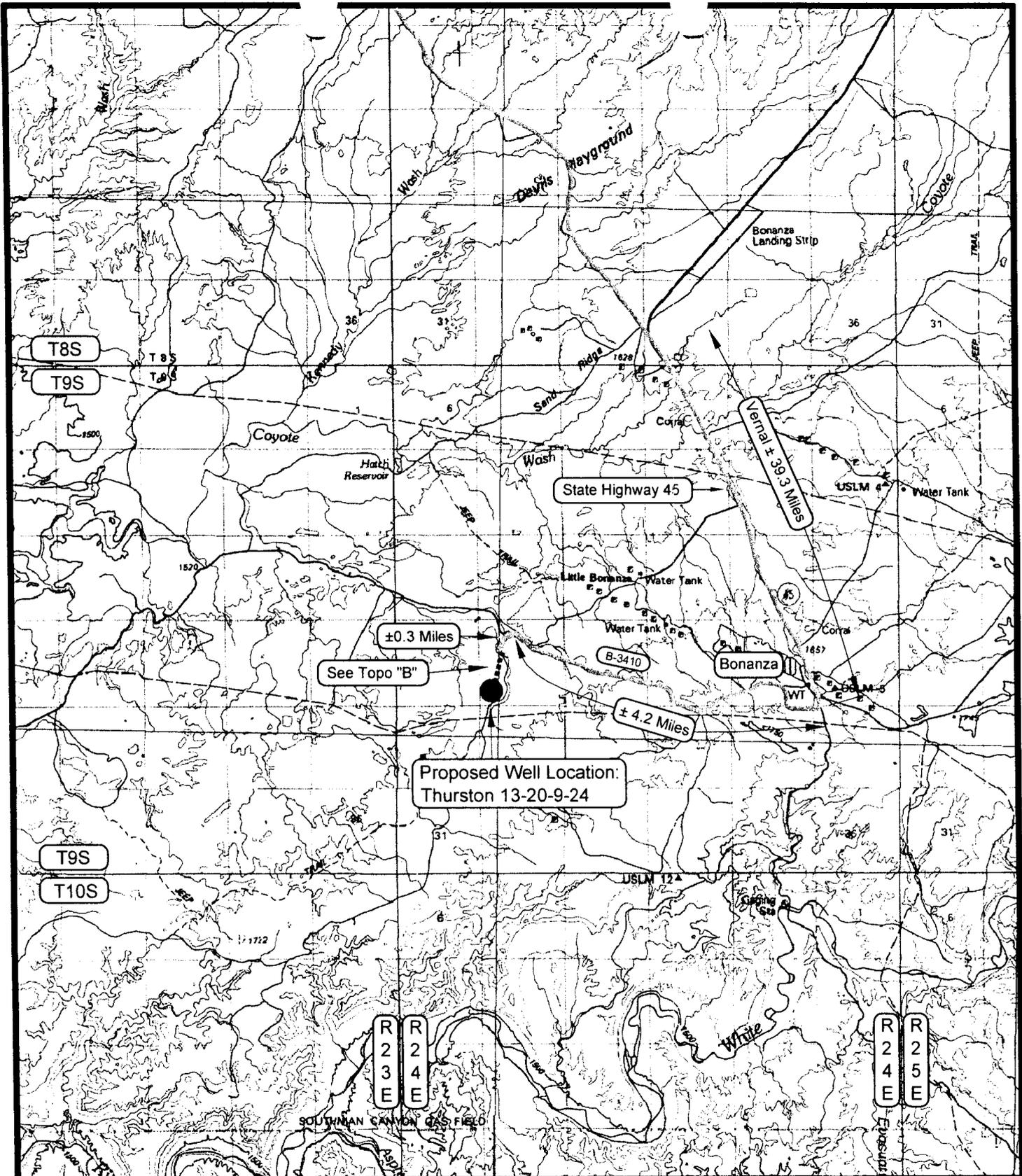
THURSTON ENERGY OPERATING COMPANY

TYPICAL PRODUCTION LAYOUT

THURSTON 13-20-9-24



Section 20, T9S, R24E, S.L.B.&M.		Qtr/Qtr Location: SW SW	Footage Location: 856' FSL & 685' FWL
Date Surveyed: 10-19-05	Date Drawn: 10-31-05	Date Last Revision:	Timberline (435) 789-1365 Land Surveying, Inc. 38 WEST 100 NORTH VERNAL, UTAH 84078
Surveyed By: K.R.K.	Drawn By: J.R.S.	Scale: 1" = 50'	
			SHEET 6 OF 10



LEGEND

- = PROPOSED WELL LOCATION
- = EXISTING ROAD
- = EXISTING ROAD (TO BE IMPROVED)
- = PROPOSED ACCESS ROAD
- B-5460 = COUNTY ROAD CLASS & NUMBER

TOPOGRAPHIC MAP "A"

DATE SURVEYED: 10-19-05

DATE DRAWN: 10-28-05

SCALE: 1:100,000

DRAWN BY: M.W.W.

REVISED:

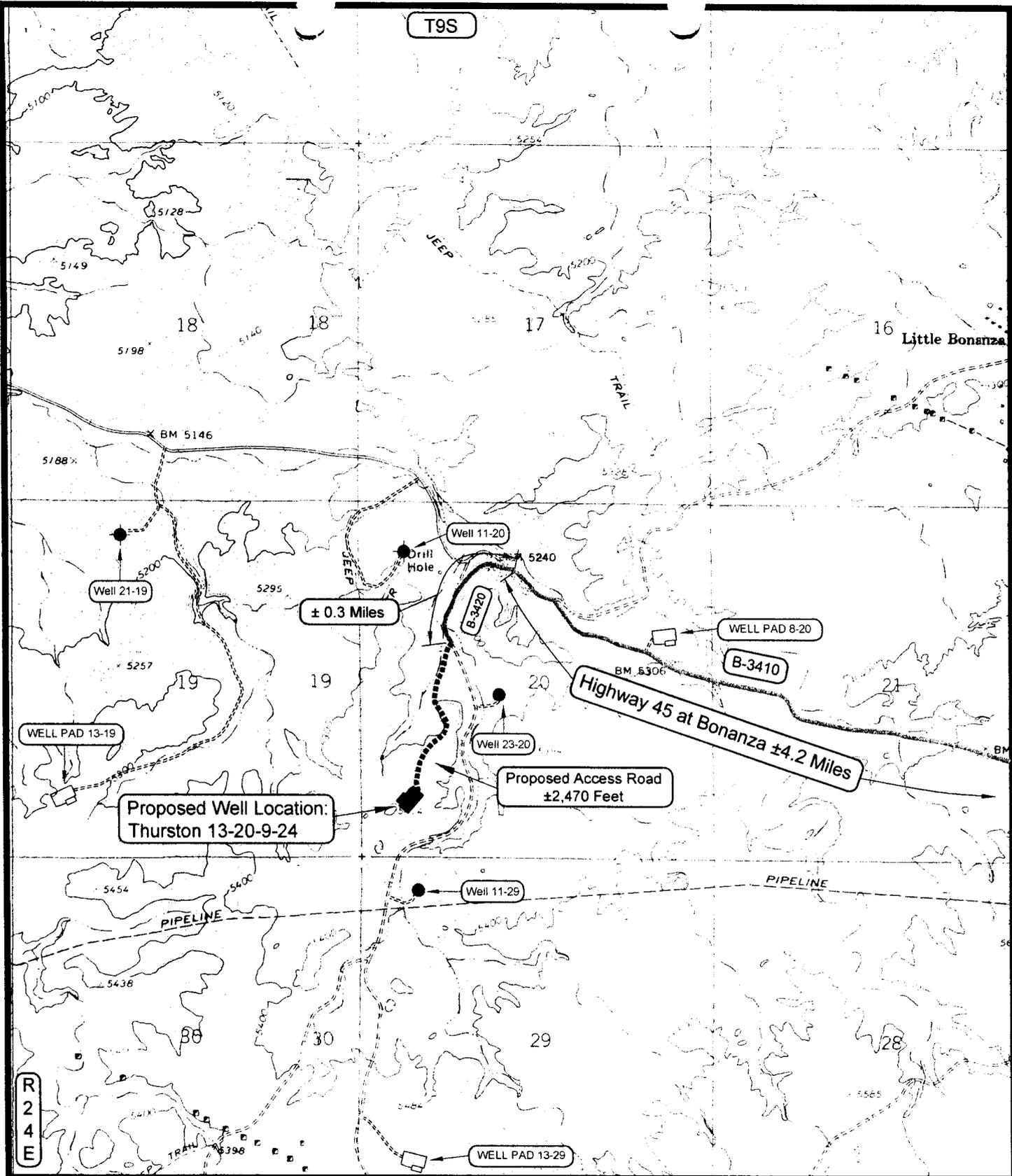
THURSTON ENERGY OPERATING COMPANY

Thurston 13-20-9-24
SECTION 20, T9S, R24E, S.L.B.&M.
856' FSL & 685' FWL

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

SHEET
7
OF 10

T9S



R
2
4
E

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

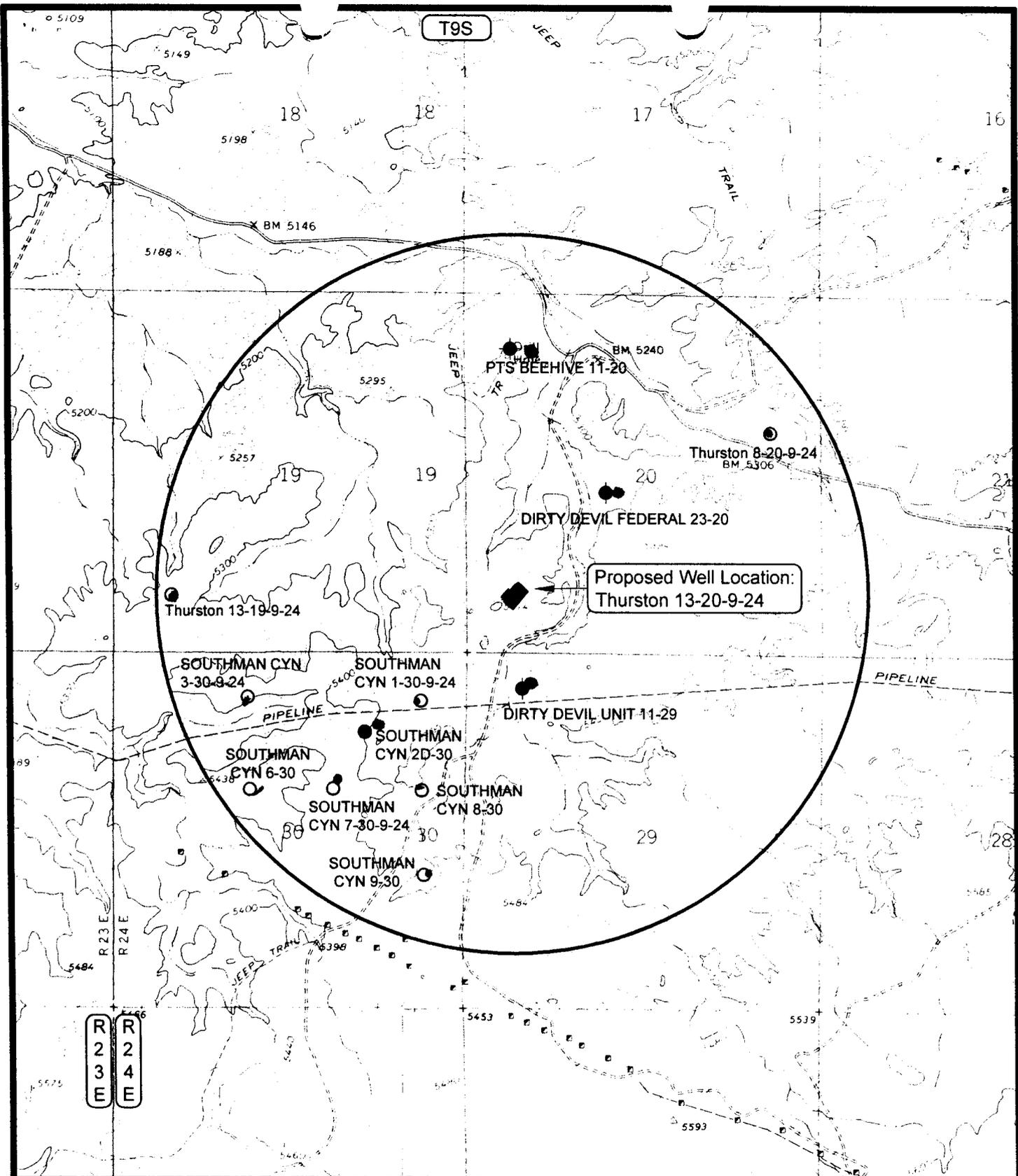
THURSTON ENERGY OPERATING COMPANY

Thurston 13-20-9-24
SECTION 20, T9S, R24E, S.L.B.&M.
856' FSL & 685' FWL

TOPOGRAPHIC MAP "B"		DATE SURVEYED: 10-19-05
SCALE: 1" = 2000'		DATE DRAWN: 10-28-05
DRAWN BY: M.W.V.	REVISED:	

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

SHEET
8
OF 10



LEGEND

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

THURSTON ENERGY OPERATING COMPANY

Thurston 13-20-9-24
SECTION 20, T9S, R24E, S.L.B.&M.
856' FSL & 685' FWL

TOPOGRAPHIC MAP "C"

DATE SURVEYED: 10-19-05

DATE DRAWN: 11-01-05

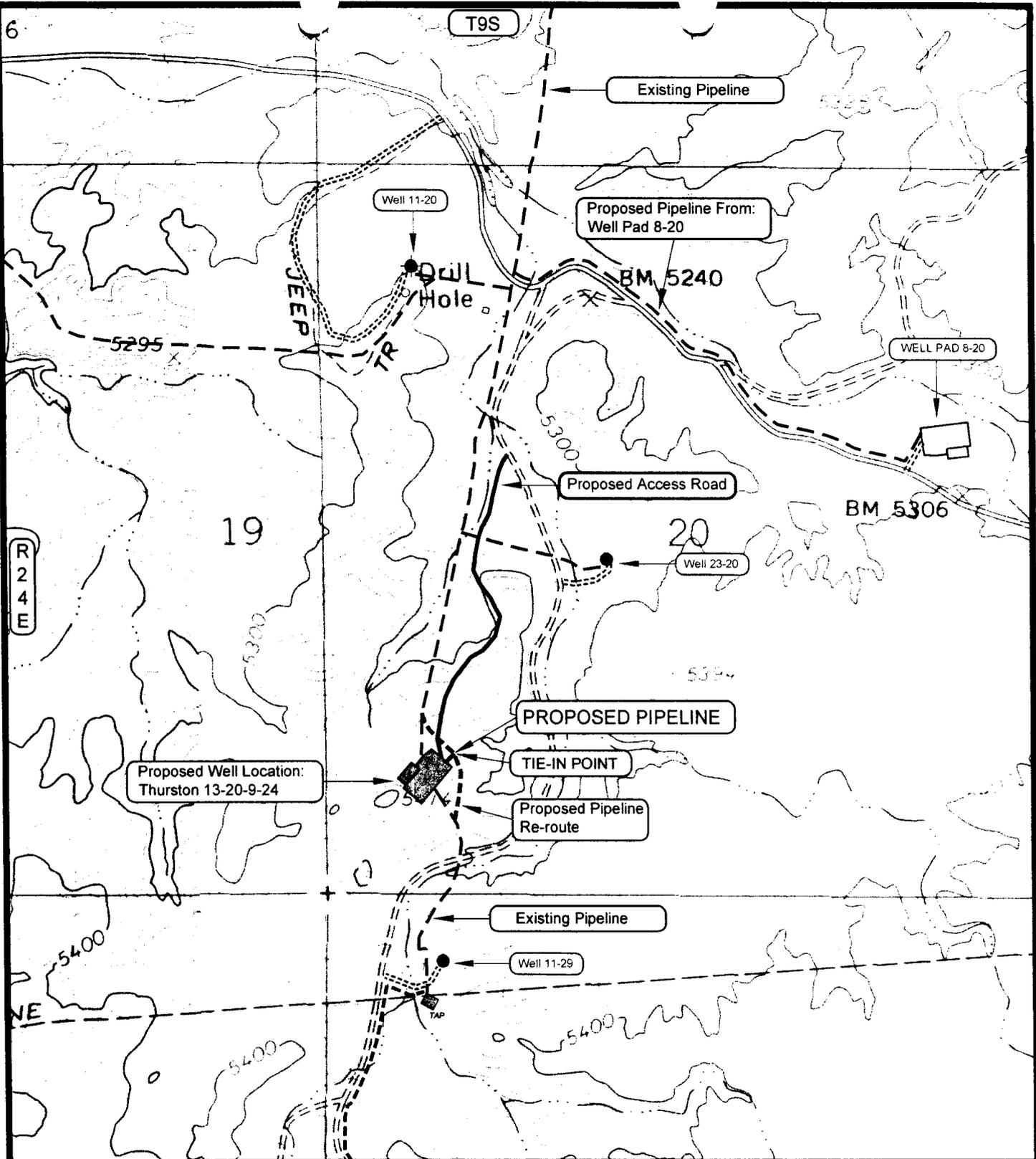
SCALE: 1" = 2000'

DRAWN BY: M.W.W.

REVISED:

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

SHEET
9
OF 10



APPROXIMATE PIPELINE LENGTH: New = ± 85 Feet, Re-route ±870 Feet

LEGEND

- = OTHER PIPELINE
- = PROPOSED PIPELINE
- = PROPOSED ACCESS ROAD
- = LEASE LINE AND/OR PROPERTY LINE

THURSTON ENERGY OPERATING COMPANY

Thurston 13-20-9-24
SECTION 20, T9S, R24E, S.L.B.&M.
856' FSL & 685' FWL

TOPOGRAPHIC MAP "D"

DATE SURVEYED: 10-19-05

DATE DRAWN: 11-01-05

SCALE: 1" = 1000'

DRAWN BY: M.W.W.

REVISED:

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: 11/07/2007

API NO. ASSIGNED: 43-047-39775

WELL NAME: THURSTON 13-20-9-24
 OPERATOR: THURSTON ENERGY (N2790)
 CONTACT: GINGER STRINGHAM

PHONE NUMBER: 435-789-0968

PROPOSED LOCATION:
 SWSW 20 090S 240E
 SURFACE: 0856 FSL 0685 FWL
 BOTTOM: 0856 FSL 0685 FWL
 COUNTY: UINTAH
 LATITUDE: 40.01654 LONGITUDE: -109.2441
 UTM SURF EASTINGS: 649851 NORTHINGS: 4430859
 FIELD NAME: DEVILS PLAYGROUND (575)

INSPECT LOCATN BY: / /		
Tech Review	Initials	Date
Engineering		
Geology		
Surface		

LEASE TYPE: 1 - Federal
 LEASE NUMBER: U-31266
 SURFACE OWNER: 1 - Federal

PROPOSED FORMATION: MVRD
 COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

Plat

Bond: Fed[1] Ind[] Sta[] Fee[]
 (No. UTB000181)

Potash (Y/N)

Oil Shale 190-5 (B) or 190-3 or 190-13

Water Permit
 (No. MUNICIPAL)

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

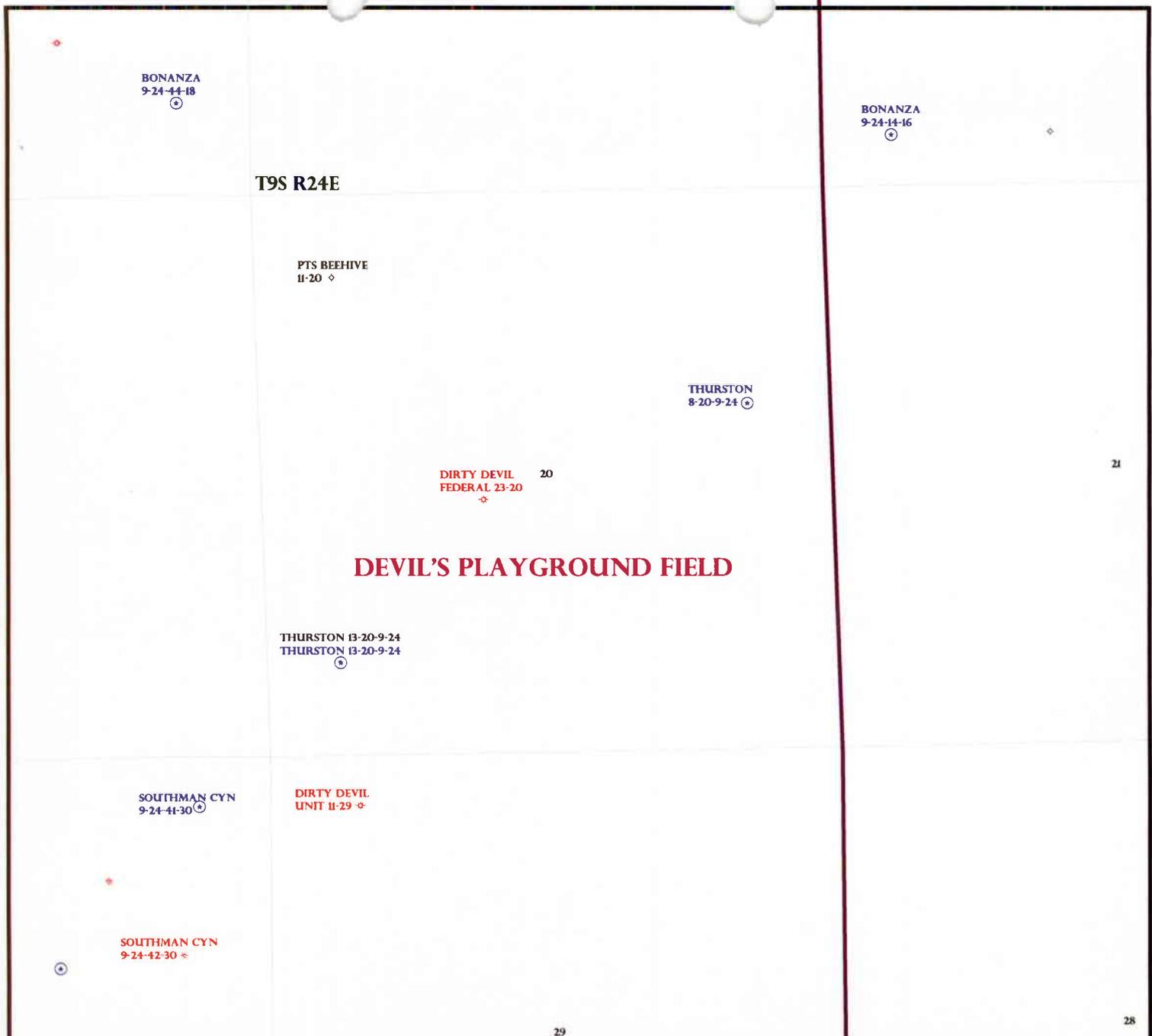
___ R649-3-3. Exception

___ Drilling Unit
 Board Cause No: _____
 Eff Date: _____
 Siting: _____

___ R649-3-11. Directional Drill

COMMENTS: _____

STIPULATIONS: _____
 1- *Code of Ethics*
 2- *Spacing Strip*



OPERATOR: THURSTON ENERGY (N2790)

SEC: 20 T.9S R. 24E

FIELD: DEVILS PLAYGROUND (575)

COUNTY: UINTAH

SPACING: R649-3-2 / GENERAL SITING

Field Status	Unit Status
ABANDONED	EXPLORATORY
ACTIVE	GAS STORAGE
COMBINED	NF PP OIL
INACTIVE	NF SECONDARY
PROPOSED	PENDING
STORAGE	PI OIL
TERMINATED	PP GAS
	PP GEOTHERML
	PP OIL
	SECONDARY
	TERMINATED

Wells Status

	GAS INJECTION
	GAS STORAGE
	LOCATION ABANDONED
	NEW LOCATION
	PLUGGED & ABANDONED
	PRODUCING GAS
	PRODUCING OIL
	SHUT-IN GAS
	SHUT-IN OIL
	TEMP. ABANDONED
	TEST WELL
	WATER INJECTION
	WATER SUPPLY
	WATER DISPOSAL
	DRILLING



PREPARED BY: DIANA MASON
DATE: 08-NOVEMBER-2007



JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil Gas and Mining

JOHN R. BAZA
Division Director

November 8, 2007

Thurston Energy Operating Company
290 S 800 E
Vernal, UT 84078

Re: Thurston 13-20-9-24 Well, 856' FSL, 685' FWL, SW SW, Sec. 20, T. 9 South,
R. 24 East, Uintah County, Utah

Gentlemen:

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

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-39775.

Sincerely,

Gil Hunt
Associate Director

pab
Enclosures

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



Operator: Thurston Energy Operating Company
Well Name & Number Thurston 13-20-9-24
API Number: 43-047-39775
Lease: U-31266

Location: SW SW **Sec.** 20 **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

Notify the division within 24 hours of spudding the well.

- Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

- Contact Dustin Doucet at (801) 538-5281 (801) 733-0983 home

3. Reporting Requirements

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

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

5. 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.



JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

February 2, 2009

Ginger Bowden
290 South 800 East
Vernal, UT 84078

Re: APD Rescinded – Thurston 13-20-9-24, Sec.20, T.9S, R. 24E
Uintah County, Utah API No. 43-047-39775

Dear Ms. Bowden:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on November 8, 2007. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective February 2, 2009.

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

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

Sincerely,

Diana Mason
Environmental Scientist

cc: Well File
Bureau of Land Management, Vernal





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



IN REPLY REFER TO:
3160
LLUTG01100

January 20, 2009

William A. Ryan, Agent
Thurston Energy Operating Company
290 South 800 East
Vernal, UT 84078

43-047-39775

Re: Notice of Expiration
Well No. Thurston 13-20-9-24
SWSW, Sec. 20, T9S, R24E
Uintah County, Utah
Lease No. UTU-31266

Dear Mr. Ryan:

The Application for Permit to Drill (APD) the above-referenced well was approved on November 30, 2006. A one (1) year extension of the original APD was requested on November 5, 2007. The request was reviewed and the extension approved until December 1, 2008. According to our records, no known activity has transpired at the approved location. In view of the foregoing, this office is notifying you that the approval of the referenced application has expired. If you intend to drill at this location in the future, a new Application for Permit to Drill must be submitted.

This office requires a letter confirming that no surface disturbance has been made for this drill site. Any surface disturbance associated with the approved location of this well is to be rehabilitated. A schedule for this rehabilitation must be submitted to this office. Your cooperation in this matter is appreciated.

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

Sincerely,

Cindy Severson

Cindy Severson
Land Law Examiner

cc: UDOGM

RECEIVED

FEB 02 2009

DIV. OF OIL, GAS & MINING