



***Enduring Resources***

475 17<sup>th</sup> Street Suite 1500 Denver Colorado 80202  
Telephone 303 573-1222 Fax 303 573 0461

February 14, 2006

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

Attn.: Ms. Diana Whitney

RE: Enduring Resources, LLC  
**Southam Canyon 10-25-13-32**  
NWSW Sec 32-10S-25E  
Uintah County, Utah  
Lease # ML-47065

Dear Ms. Whitney:

Enclosed are two original applications to drill concerning the above-referenced proposed well. This information was also submitted to SITLA.

Enduring Resources, LLC is requesting the Utah Division of Oil, Gas and Mining to hold this application and all future information as confidential.

If any questions arise or additional information is required, please contact me at 303-350-5114.

Very truly yours,

**ENDURING RESOURCES, LLC**

Alvin R. (Al) Arlian  
Landman-Regulatory Specialist

ara  
Enclosures:

cc: SITLA w/ attachments

**RECEIVED**

**FEB 17 2006**

**DIV. OF OIL, GAS & MINING**

**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: <b>ML-47065</b>	6. SURFACE: State
1A. TYPE OF WORK: DRILL <input checked="" type="checkbox"/> REENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/>				7. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
B. TYPE OF WELL: OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> OTHER _____ SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>				8. UNIT or CA AGREEMENT NAME:	
2. NAME OF OPERATOR: <b>Enduring Resources, LLC</b>				9. WELL NAME and NUMBER: <b>Southam Canyon 10-25-13-32</b>	
3. ADDRESS OF OPERATOR: <b>475 17th St., Ste 1500</b> CITY <b>Denver</b> STATE <b>CO</b> ZIP <b>80220</b>			PHONE NUMBER: <b>(303) 350-5114</b>	10. FIELD AND POOL, OR WILDCAT: <b>Undesignated</b>	
4. LOCATION OF WELL (FOOTAGES) AT SURFACE: <b>1,801' FSL - 629' FWL</b> AT PROPOSED PRODUCING ZONE: <b>Same</b>				11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>NWSW 32 10S 25E S</b>	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: <b>11.6 miles southwesterly of Bonanza, Utah</b>				12. COUNTY: <b>Uintah</b>	13. STATE: <b>UTAH</b>
15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET) <b>629'</b>	16. NUMBER OF ACRES IN LEASE: <b>640</b>		17. NUMBER OF ACRES ASSIGNED TO THIS WELL: <b>40 acres</b>		
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET) <b>1142'</b>	19. PROPOSED DEPTH: <b>5,250</b>		20. BOND DESCRIPTION: <b>RLB0008031</b>		
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): <b>5640' RT-KB</b>		22. APPROXIMATE DATE WORK WILL START: <b>4/1/2006</b>	23. ESTIMATED DURATION: <b>20 days</b>		

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			
20"	14" line pipe	40	3 yards	Ready Mix		
11"	8-5/8" J-55 24#	2,000	Premium Lead	138 sxs	3.50	11.1
			Premium Tail	138 sxs	1.15	15.8
7-7/8"	4-1/2" N-80 11.6#	5,250	Class G	3 sxs	3.3	11.0
			50/50 Poz Class G	643 sxs	1.56	14.3

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

**CONFIDENTIAL**

NAME (PLEASE PRINT) Alvin R. (Al) Arlian TITLE Landman - Regulatory Specialist

SIGNATURE  DATE 2/14/2006

(This space for State use only)

API NUMBER ASSIGNED: 43-047-37797

APPROVAL:

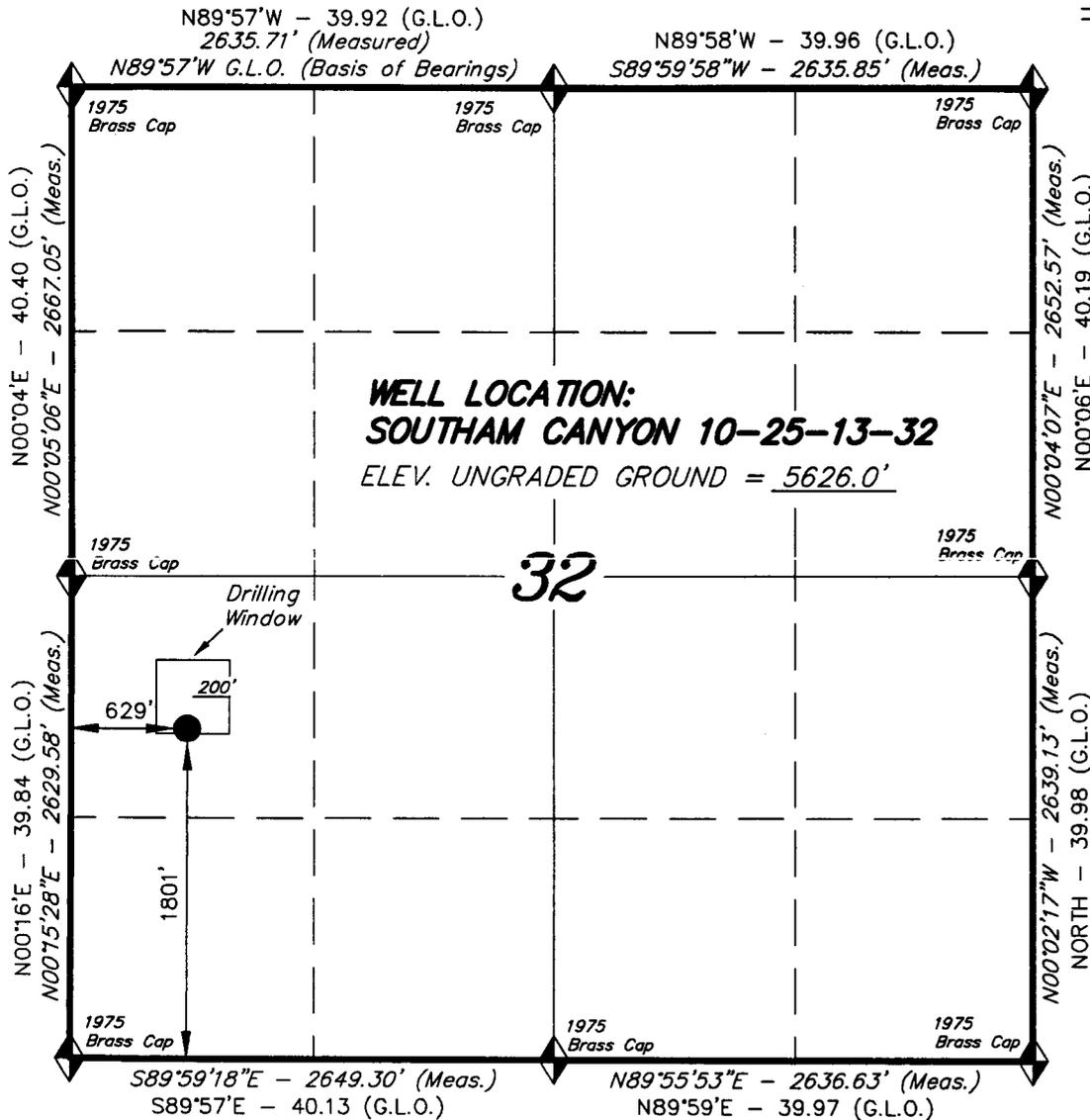
**RECEIVED**  
**FEB 17 2006**

DIV. OF OIL, GAS & MINING

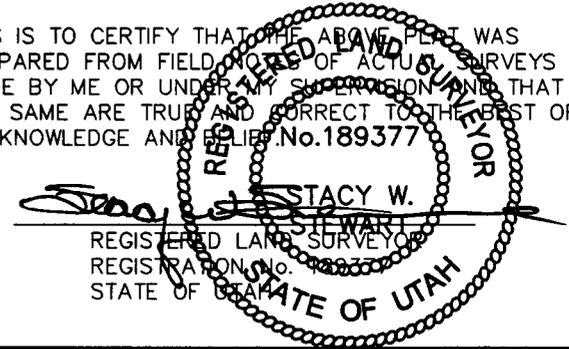
# T10S, R25E, S.L.B.&M.

## ENDURING RESOURCES

WELL LOCATION, SOUTHAM CANYON  
10-25-13-32, LOCATED AS SHOWN IN  
THE NW 1/4 SW 1/4 OF SECTION 32,  
T10S, R25E, S.L.B.&M. UINTAH COUNTY,  
UTAH.



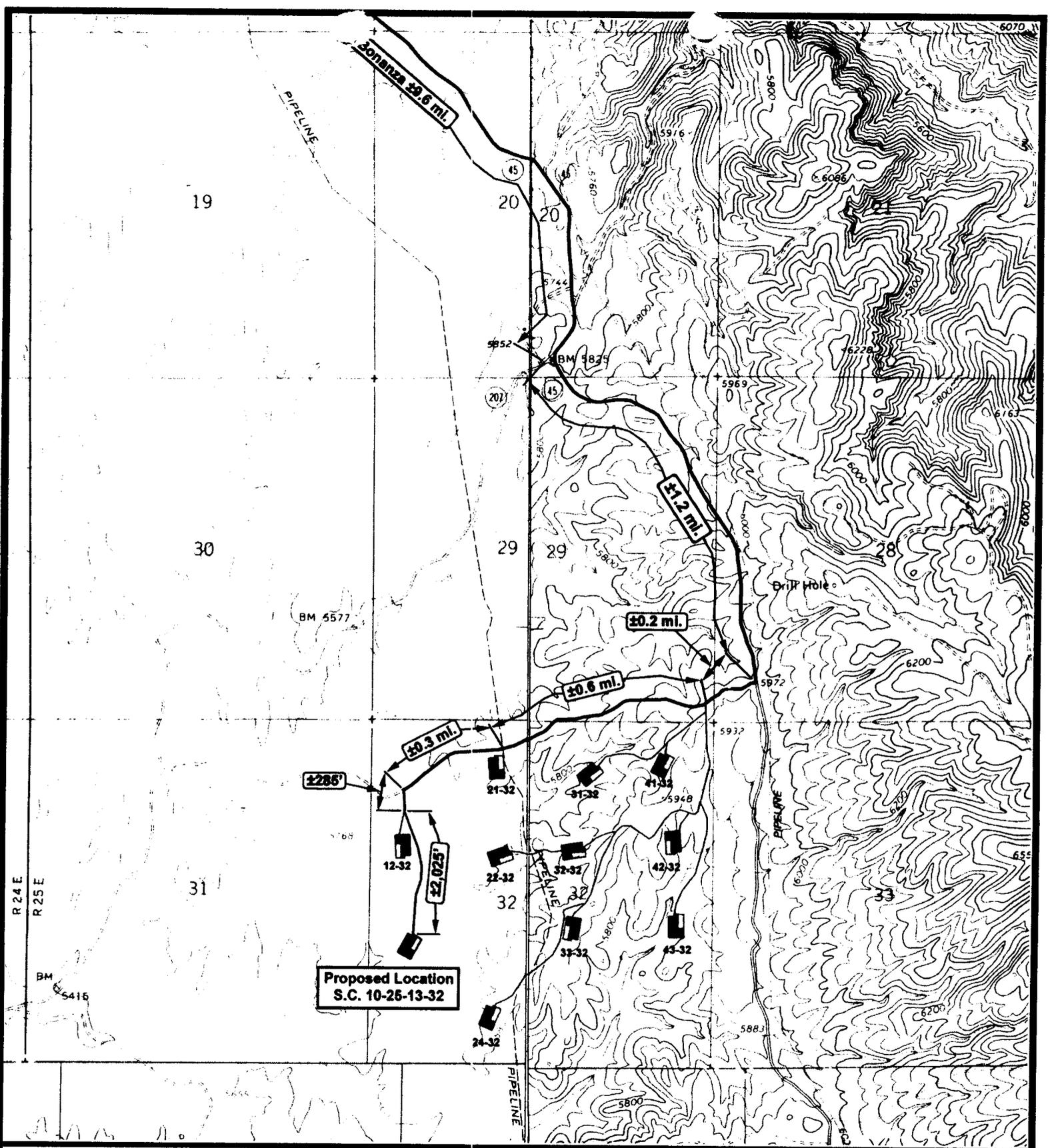
THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS  
PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS  
MADE BY ME OR UNDER MY SUPERVISION AND THAT  
THE SAME ARE TRUE AND CORRECT TO THE BEST OF  
MY KNOWLEDGE AND BELIEF. No. 189377



◆ = SECTION CORNERS LOCATED  
BASIS OF ELEV; U.S.G.S. 7-1/2 min  
QUAD (SOUTHAM CANYON)

**SOUTHAM CANYON 10-25-13-32**  
**(Surface Location) NAD 83**  
LATITUDE = 39° 54' 11.27"  
LONGITUDE = 109° 07' 55.63"

<b>TRI STATE LAND SURVEYING &amp; CONSULTING</b>		
180 NORTH VERNAL AVE. - VERNAL, UTAH 84078 (435) 781-2501		
DATE DRAWN: 10-26-05	SURVEYED BY: J.H.	<b>SHEET 2 OF 9</b>
REVISED:	DRAWN BY: F.T.M.	
NOTES:	SCALE: 1" = 1000'	



  
**ENDURING RESOURCES**  
**Southam Canyon 10-25-13-32**  
**Sec. 32, T10S, R25E, S.L.B.&M.**

  
  
**Tri-State**  
*Land Surveying Inc.*  
 (435) 781-2501  
 180 North Vernal Ave. Vernal, Utah 84078  
 SCALE: 1" = 2,000'  
 DRAWN BY: bgm  
 DATE: 11-11-2005

**Legend**  
 Existing Road  
 Proposed Access  
**TOPOGRAPHIC MAP**

**SHEET**  
**7**  
**OF 9**

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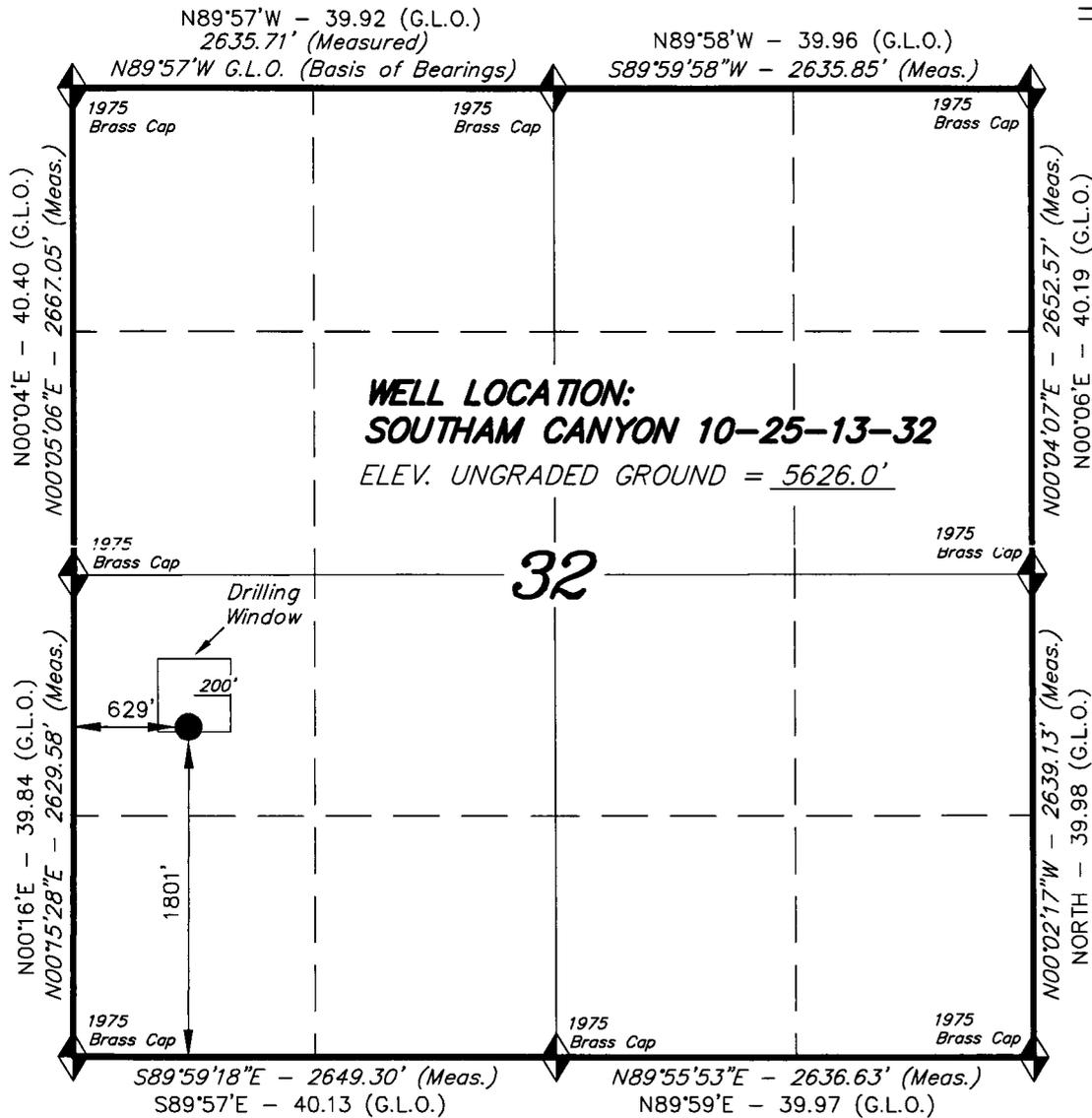
**Approved by the  
Utah Division of  
Oil, Gas and Mining**

APPROVAL:  
Date: 03-27-06  
By:

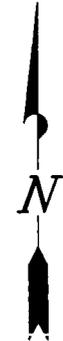
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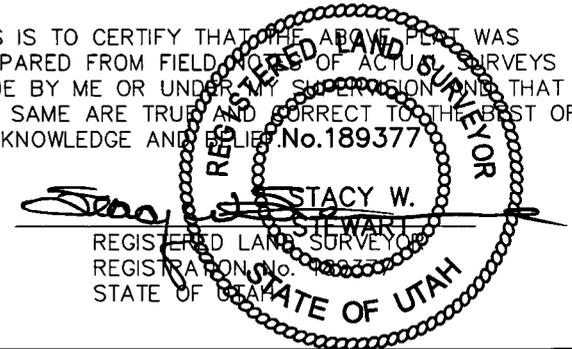
## ENDURING RESOURCES



WELL LOCATION, SOUTHAM CANYON 10-25-13-32, LOCATED AS SHOWN IN THE NW 1/4 SW 1/4 OF SECTION 32, T10S, R25E, S.L.B.&M. UTAH COUNTY, UTAH.



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BASIS OF ELEV; U.S.G.S. 7-1/2 min QUAD (SOUTHAM CANYON)

**SOUTHAM CANYON 10-25-13-32**  
 (Surface Location) NAD 83  
 LATITUDE = 39° 54' 11.27"  
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**TRI STATE LAND SURVEYING & CONSULTING**  
 180 NORTH VERNAL AVE. - VERNAL, UTAH 84078  
 (435) 781-2501

DATE DRAWN: 10-26-05	SURVEYED BY: J.H.	<b>SHEET</b> <b>2</b> <b>OF 9</b>
REVISED:	DRAWN BY: F.T.M.	
NOTES:	SCALE: 1" = 1000'	

**Enduring Resources, LLC  
 Southam Canyon 10-25-13-32  
 NSW Sec 32-10S-25E  
 Uintah County, Utah  
 Lease # 47065**

**ONSHORE ORDER 1 - DRILLING PLAN**

**1. Estimated Tops of Geological Markers:**

Formation	Depth (K.B.)
Uinta	
Green River	surface
Wasatch	2130'
Mesaverde	3123'

**2. Estimated Depths of Anticipated Water, Oil, Gas or Other Minerals:**

Substance	Formation	Depth (K.B.)
	KB-Uinta Elevation: 5640'	
Oil	Green River	surface
Oil /Gas	Wasatch	2130'
Oil /Gas	Mesaverde	3123'
	Estimated TID	5030'

An 11" hole will be drilled to approximately 2000 feet. The depth will be determined by the depth that the Birds Nest zone is encountered. The hole will be drilled 400 feet beyond the top of the Birds Nest zone and surface casing will be set.

**3. Pressure Control Equipment: (3000 psi schematic attached)**

- A. Type: Eleven (11) inch double gate hydraulic BOP with eleven (11) inch annular preventer on 3,000 psi casinghead, with 3,000 psi choke manifold equipped per the attached diagram. BOPE as specified in *Onshore Oil & Gas Order Number 2*. A PVT, stroke counter and flow sensor will be installed to check for flow and monitor pit volume.
- B. Pressure Rating: 3,000 psi BOPE
- C. Kelly will be equipped with upper and lower Kelly valves.
- D. Testing Procedure: Annular Preventer

At a minimum, the annular preventer will be pressure tested to 50% of the stack rated working pressure for a period of ten (10) minutes or until provisions of the test are met, whichever is longer.

At a minimum, the above pressure test will be performed:

1. When the annular preventer is initially installed;
2. Whenever any seal subject to test pressure is broken;
3. Following related repairs; and
4. At thirty (30) day intervals.

In addition to the above, the annular preventer will be functionally operated at least weekly.

**Blow-Out Preventer**

At a minimum, the BOP, choke manifold, and related equipment will be pressure tested to the approved working pressure of the BOP stack (if isolated from the surface casing by a test plug) or to 70% of the internal yield strength of the surface casing (if the BOP is not isolated from the casing by a test plug). Pressure will be maintained for a period of at least ten (10) minutes or until the requirements of the test are met, whichever is longer.

At a minimum, the above pressure test will be performed:

1. When the BOP is initially installed;
2. Whenever any seal subject to test pressure is broken;
3. Following related repairs; and
4. At thirty (30) day intervals.

In addition to the above, the pipe and blind rams will be activated each trip, but not more than once each day. All BOP drills and tests will be recorded in the IADC driller's log.

**E. Miscellaneous Information:**

The blowout preventer and related pressure control equipment will be installed, tested and maintained in compliance with the specifications in and requirements of *Onshore Oil & Gas Order Number 2*.

**4. Proposed Casing & Cementing Program:**

**A. Casing Program: All New**

Hole Size	Casing Size	Wt./Ft.	Grade	Joint	Depth Set (MD)
20"	14" O.D.				40' (GL)
11"	8-5/8"	24#	J-55	ST&C	0 – 2,016' (KB) est.
7-7/8"	4-1/2"	11.6#	N-80	LT&C	0 – 5,250' (KB)

The surface casing will have guide shoe, 1 joint, insert float collar. Centralize the shoe joint with bowspring centralizers in the middle and top of the joint and the next 16 joints with bowspring centralizers on every other collar (8 centralizers total). Thread lock guide shoe.

Casing string(s) will be pressure tested to 0.22 psi/foot of casing string length or 1500 psi, whichever is greater (not to exceed 70% of the internal yield strength of the casing), after cementing and prior to crilling out from under the casing shoe.

**B. Casing Design Parameters:**

Depth (MD)	Casing	Collapse(psi)/SF	Burst (psi)/SF	Tension(mlbs)/SF
40' (GL)	14" OD			
2016' (KB)	8-5/8", 24#/ft, J55, STC	1370/1.52(a)	2950/3.28(b)	244/5.81(c)
5250' (KB)	4-1/2", 11.6#/ft, N-80, LTC	6350/2.33 (d)	7780/3.10 (e)	223/4.26 (f)

- (a.) based on full evacuation of pipe with 8.6 ppg fluid on annulus
- (b.) based on 8.6 ppg gradient with no fluid on annulus
- (c.) based on casing string weight in 8.6 ppg mud
- (d.) based on full evacuation of pipe with 10.0 ppg fluid on annulus
- (e.) based on 9.2 ppg gradient, gas to surface, with no fluid on annulus, no gas gradient
- (f.) based on casing string weight in 9.2 ppg mud

**PROPOSED CEMENTING PROGRAM**

**Surface Casing (if well will circulate)-Cemented to surface**

CASING	SLURRY	FT. of FILL	CEMENT TYPE	SXS	EXCESS (%)	WEIGHT (ppg)	YIELD (ft <sup>3</sup> /sx)
8-5/8"	Lead	1516	Premium cement + 16% gel + 0.25 pps celloflake	138	25%	11.1	3.50
8-5/8"	Tail	500	Premium cement + 2% CaCl <sub>2</sub> + 0.25 pps celloflake	138	25%	15.8	1.15

A cement top job is required if cement fallback is greater than 10' below ground level. Top job (weight 15.8 ppg, yield 1.15 ft<sup>3</sup>/sx) cement will be premium cement w/ 3% CaCl<sub>2</sub> + 0.25 pps celloflake. Volume as required

**Surface Casing (if well will not circulate) - Cemented to surface**

CASING	SLURRY	FT. of FILL	CEMENT TYPE	SXS	EXCESS (%)	WEIGHT (ppg)	YIELD (ft <sup>3</sup> /sx)
8-5/8"	Lead	500	Premium cement + 2% CaCl <sub>2</sub> + 0.25 pps celloflake	138	25	15.8	1.15
8-5/8"	Top job	As req.	Premium cement + 3% CaCl <sub>2</sub> + 0.25 pps celloflake	As Req.		15.8	1.15

**Production Casing and Liner** - Cemented TD to 300' above base of surface casing

CASING	SLURRY	FT. of FILL	CEMENT TYPE	SXS	EXCESS (%)	WEIGHT (ppg)	YIELD (ft <sup>3</sup> /sx)
4-1/2"	Lead	14	Class "G" + 5% NaCl + 12% Gel + 0.25 pps celloflake + 0.2% antifoam + 0.25% fluid loss + 1% extender	3	25	11.0	3.3
4-1/2"	Tail	3520	50/50 POZ Class G + 2% gel + 1% CaCl <sub>2</sub> + 0.2% dispersant + 0.2% fluid loss + 0.1% antifoam	643	25	14.3	1.56

Cement volumes for the 4-1/2" Production Casing will be calculated to provide a top of cement to 300' above base of surface casing. Cement volumes are approximate and were calculated under the assumption that a gauge hole will be achieved. Actual cement volumes may vary due to variations in the actual hole size and will be determined by running a caliper log on the drilled hole. Actual cement types may vary due to hole conditions and cement contractor used.

All waiting on cement (WOC) times will be adequate to achieve a minimum of 500 psi compressive strength at the casing shoe prior to drilling out.

**5. Drilling Fluids (mud) Program:**

Interval (MD)	Mud Weight	Fluid Loss	Viscosity	Mud Type
0' - 2016' (KB)		No cntrl		Air/mist
2000'-3000' (KB)	8.4-8.6	No cntrl	28-36	Water
3000'-5250' (KB)	8.8-9.8	8 - 10 ml	32-42	Water/Gel

Sufficient mud material(s) to maintain mud properties, control lost circulation and contain a blowout will be available at the well site during drilling operations.

**6. Evaluation Program:**

Tests: No tests are currently planned.

Coring: No cores are currently planned.

Samples: No sampling is currently planned.

Logging

- Dual Induction – SFL /Gamma Ray/Caliper/SP/TDLT/CNL/ML  
TD to Base Surface Casing
- Cement Bond Log / Gamma Ray:  
TD to Base of Surface Casing or Top of Cement if below Base of Surface Casing

Stimulation: A stimulation or frac treatment will be designed for completion of this well based on openhole log analysis. The drill site, as approved, will be sufficient size to accommodate all completion activities.

**7. Abnormal Conditions:**

No abnormal temperatures or pressures are anticipated. No H<sub>2</sub>S has been encountered or known to exist from previous wells drilled to similar depths in the general area.

Maximum anticipated bottom hole pressure equals approximately 2,730 psi (calculated at 0.52 psi/foot of hole) and maximum anticipated surface pressure equals approximately 1,575 psi (anticipated bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot of hole).

**8. Anticipated Starting Dates:**

- Anticipated Commencement Date- Within one year of APD issue.
- Drilling Days- Approximately 10 days
- Completion Days - Approximately 10 days
- Anticipate location construction within 30 days of permit issue.

**9. Variances:**

None anticipated

**10. Other:**

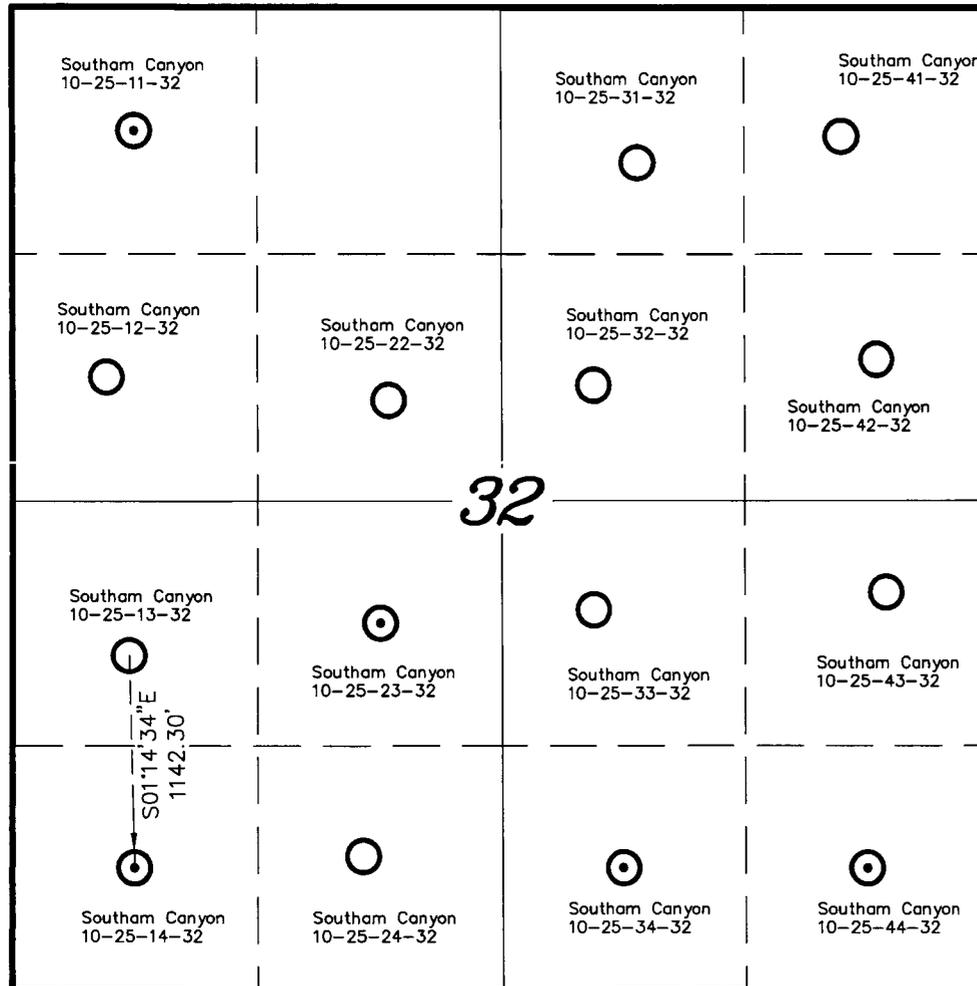
A Cultural Resource Inventory and Paleontology reconnaissance shall be conducted for the well location, access route and pipeline. The reports shall be submitted to the Division of Oil, Gas and Mining and the School and Institutional Trust lands Administration upon their receipt.

Single Shot directional surveys will be dropped every 2000 feet to monitor hole angle.

**T10S, R25E, S.L.B.&M.**

**ENDURING RESOURCES**

**SECTION DRILLING MAP**  
**Southam Canyon 10-25-13-32**



**LEGEND**

- = Vertical Well
- ⊙ = Directional Well / Bottom Hole

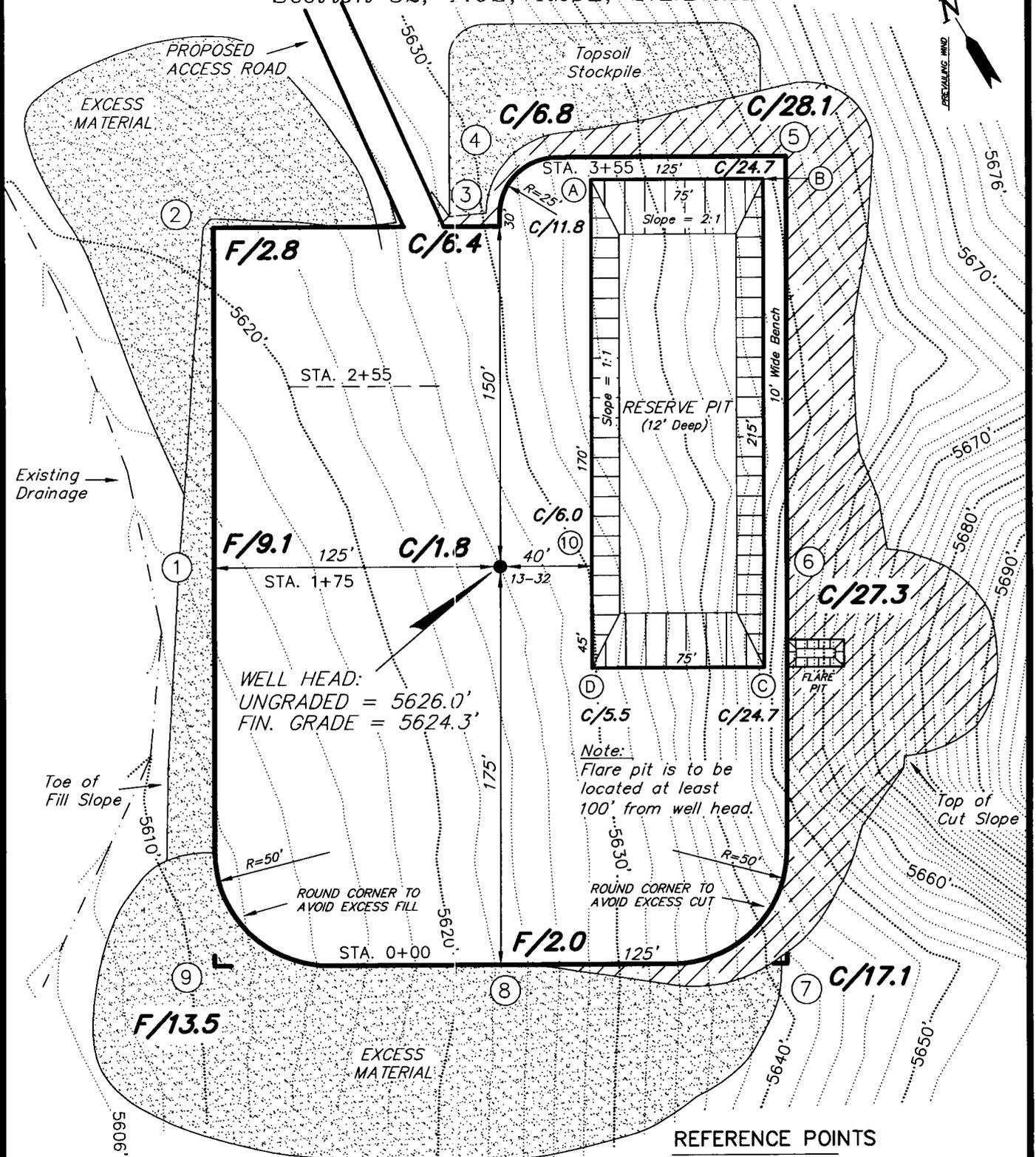
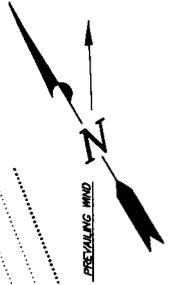
**TRI STATE LAND SURVEYING & CONSULTING**

180 NORTH VERNAL AVE. - VERNAL, UTAH 84078  
 (435) 781-2501

DATE DRAWN: 10-26-05	SURVEYED BY: J.H.	<b>SHEET</b> <b>1</b> <b>OF 9</b>
REVISED:	DRAWN BY: F.T.M.	
NOTES:	SCALE: 1" = 1000'	

# ENDURING RESOURCES

SOUTHAM CANYON 10-25-13-32  
Section 32, T10S, R25E, S.L.B.&M.



WELL HEAD:  
UNGRADED = 5626.0'  
FIN. GRADE = 5624.3'

Note:  
Flare pit is to be located at least 100' from well head.

### REFERENCE POINTS

225' SOUTHWESTERLY = 5622.4'  
275' SOUTHWESTERLY = 5622.6'

SURVEYED BY:	J.H.	DATE DRAWN:	10-26-05
DRAWN BY:	F.T.M.	SCALE:	1" = 60'
NOTES:			

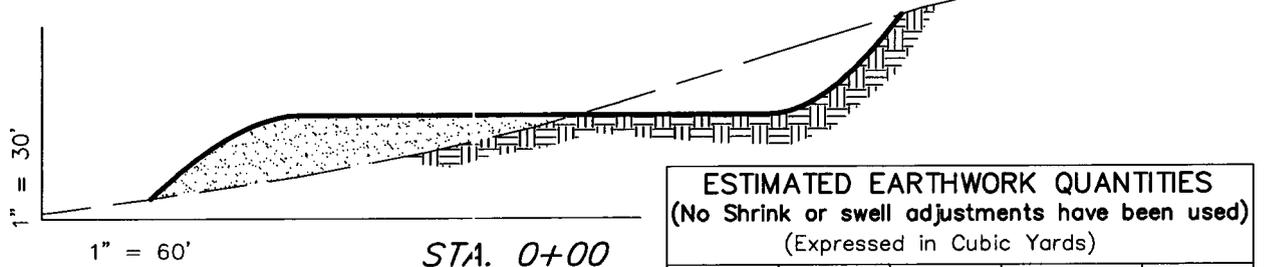
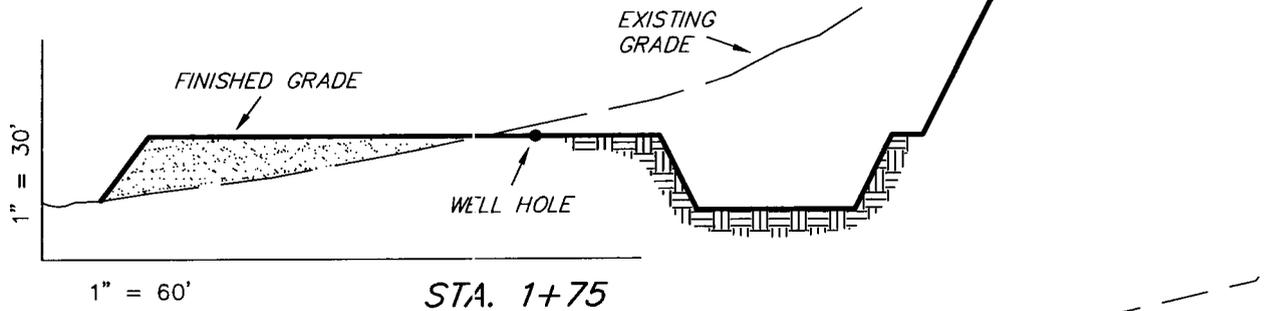
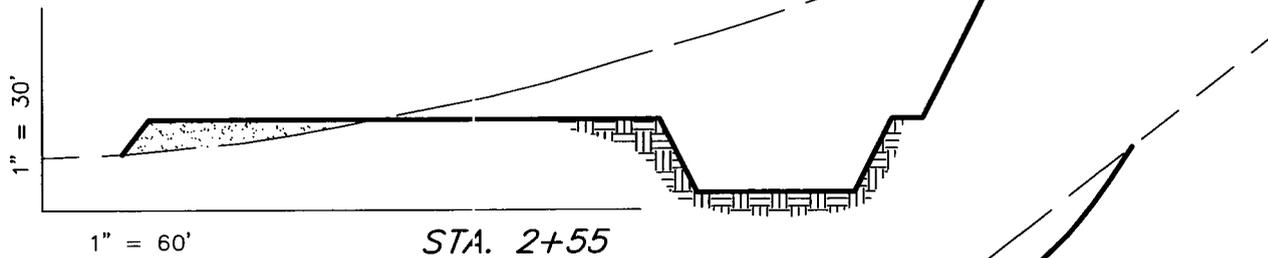
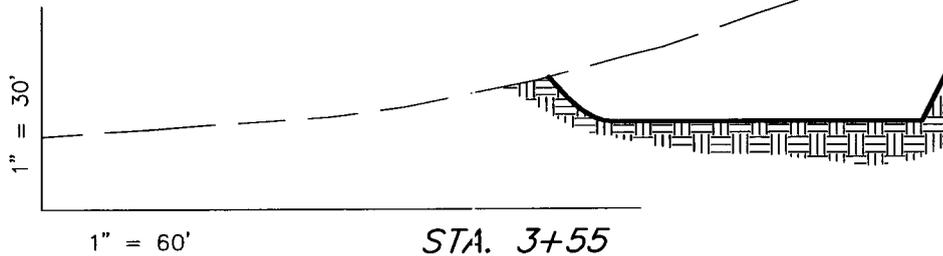
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SHEET  
**3**  
OF 9

# ENDURING RESOURCES

## CROSS SECTIONS

### SOUTHAM CANYON 10-25-13-32



ESTIMATED EARTHWORK QUANTITIES (No Shrink or swell adjustments have been used) (Expressed in Cubic Yards)				
ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	29,010	8,750	Topsail is not included in Pad Cut	20,260
PIT	5,390	0		5,390
TOTALS	34,400	8,750	2,050	25,650

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

SURVEYED BY: J.H. DATE DRAWN: 10-26-05

DRAWN BY: F.T.M. SCALE: 1" = 60'

NOTES:

**Tri State**  
Land Surveying, Inc.  
180 NORTH VERNAL AVE. VERNAL, UTAH 84078  
(435) 781-2501

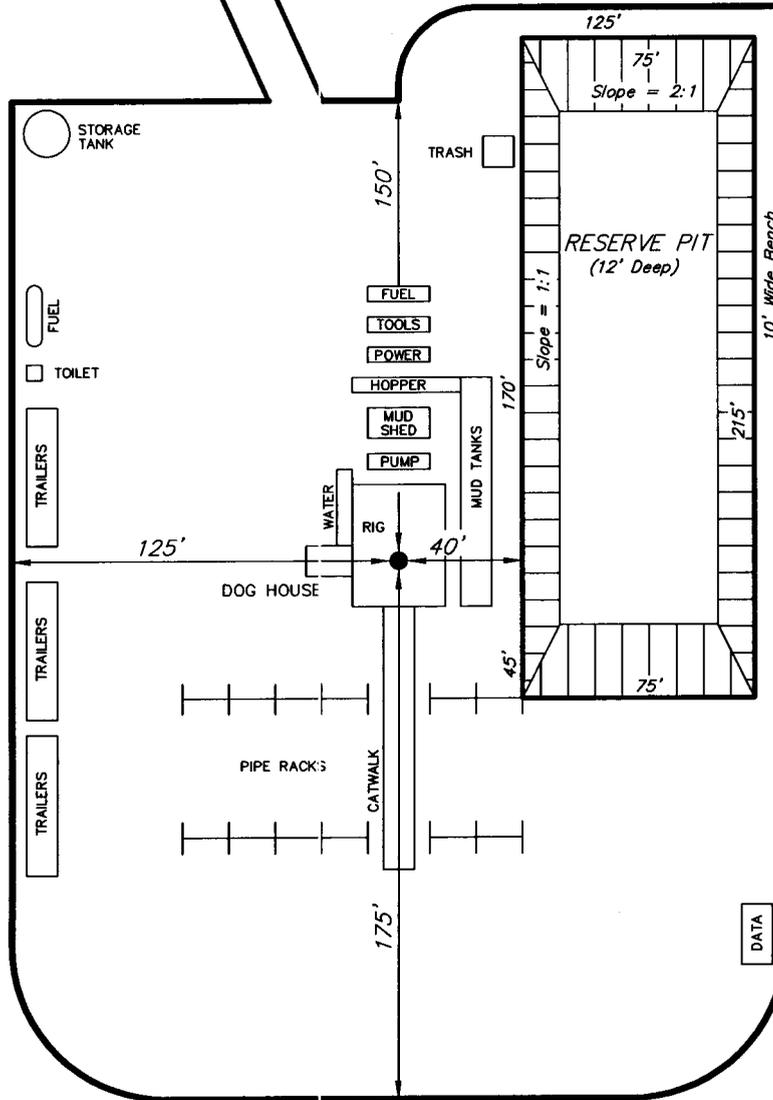
SHEET  
4  
OF 9

# ENDURING RESOURCES

## TYPICAL RIG LAYOUT

### SOUTHAM CANYON 10-25-13-32

PROPOSED ACCESS ROAD



Note:  
Flare pit is to be located at least 100' from well head.

SURVEYED BY: J.H.	DATE DRAWN: 10-26-05
DRAWN BY: F.T.M.	SCALE: 1" = 60'
NOTES:	

**Tri State** (435) 781-2501  
 Land Surveying, Inc.  
 180 NORTH VERNAL AVE. VERNAL, UTAH 84078

### **Directions to the Southam Canyon 10-25-13-32 Well Pad**

Beginning at the city of Bonanza, Utah. Leave the city of Bonanza heading south on U.S. Highway 45, which becomes a paved road, for a distance of approximately 3.7 miles where the road turns left at a gaging station. Do not turn left. Continue southeasterly on the same road for a distance of 5.9 miles, where there is a fork in the road. Turn left, and proceed for a distance of approximately 1.2 miles. Turn right and bear westerly approximately 1.1 miles to the beginning of the proposed access. Thence proceed south for approximately 2310 feet (0.4 miles) along the proposed access to the proposed Southam Canyon 10-25-13-32 well pad.

**Enduring Resources, LLC  
Southam Canyon 10-25-13-32  
NWSW Sec 32-10S-25E  
Uintah County, Utah  
Lease # 47065**

**MULTI-POINT SURFACE USE & OPERATIONS PLAN**

**1. Existing Roads:**

**Directions to the Southam Canyon 10-25-13-32 Well Pad**

Beginning at the city of Bonanza, Utah. Leave the city of Bonanza heading south on U.S. Highway 45, which becomes a paved road, for a distance of approximately 3.7 miles where the road turns left at a gaging station. Do not turn left. Continue southeasterly on the same road for a distance of 5.9 miles, where there is a fork in the road. Turn left, and proceed for a distance of approximately 1.2 miles. Turn right and bear westerly approximately 1.1 miles to the proposed access. Thence continue south for approximately 2,310 feet (0.4 miles) along the proposed Southam Canyon 10-25-13-32 well pad.

Total distance from Bonanza, Utah to the proposed well location is approximately 11.6 miles in a southwesterly direction.

**2. Planned Access Roads:**

The proposed access road will be approximately 2,310 feet of new construction (ON-LEASE), and no new construction OFF-LEASE. **(285' of the on-lease access will also be used by the Southam Canyon 10-25-12-32 well as access road.)** The balance of the ON-LEASE and OFF-LEASE road is a county road that will be improved subject to Uintah County, Utah approval. Please refer to Topo Map "B" for the takeoff point for the new ON-LEASE road construction.

***No BLM access is needed, as the road crossing BLM lands is a county maintained road.***

The proposed access road will be utilized to transport personnel, equipment and supplies to and from the proposed well site during drilling, completion and production operations. The road will be utilized year round.

The access road will be crowned 2% to 3%, ditched and constructed with a running surface of 18 feet and a maximum disturbed width of 30 feet right-of-way. Maximum grade of road is 5% or less. Graveling or capping the roadbed will be performed as necessary to provide a well constructed, safe road. No fence crossings, culverts, turnouts, cattle guards or major cuts and fills are required. Prior to construction or upgrading, the proposed road shall be cleared of any snow and allowed to dry completely.

Surface disturbance and vehicular traffic will be limited to the proposed location and proposed access route. Any additional area needed will be approved in advance. All construction shall be in conformance with the standards outlined in the BLM and Forest Service publication: Surface Operating Standards for Oil and Gas Exploration and Development. 1989.

The road surface and shoulders will be kept in a safe usable condition and will be maintained in accordance with the original construction standards. All drainage ditches will be kept clear and free flowing and will be maintained according to original construction standards. The access road surface will be kept free of trash during operations. All traffic will be confined to the approved disturbed surface. Road drainage crossings shall be designed so they will not cause siltation or accumulation of debris in the drainage crossing nor shall the drainages be blocked by the road bed. Erosion of drainage ditches by runoff water shall be prevented by diverting water off at frequent intervals by means of cut-outs. Upgrading shall not be allowed during muddy conditions. Should mud holes develop, they shall be filled in and detours around them avoided. When snow is removed from the road during the winter months, the snow shall be pushed outside of the borrow ditches and the turnouts kept clear so that snowmelt will be channeled away from the road.

**3. Location of Existing Wells within a One-Mile radius (See "Topo" Map "C" attached):**

The following wells are wells located within a one (1) mile or greater radius of the proposed location.

- a. None: Water Wells:
  - b. None: Injection Wells:
  - c. None: Producing Wells:
  - d. None: Drilling Wells:
  - e. None: Shut-in Wells:
  - f. None: Temporarily Abandoned Wells:
  - g. None: Disposal Wells:
  - h. None: Abandoned Wells:
  - i. None: Dry Holes:
  - j. None: Observation Wells:
  - k. Ten: Pending (staked) Wells:
- Enduring Resources, LLC is permitting ten other wells in Section 32 on this same lease. See Plat "C" attached. In addition, the Southam 10-25-21-32 is waiting completion.

**4. Location of Existing and/or Proposed Facilities:**

All production facilities will be located on the disturbed portion of the well pad and at a minimum of 25 feet from the toe of the back slope or the top of the fill slope.

13

A dike will be constructed completely around those production facilities which contain fluids (i.e. production tanks, produced water tanks and/or heater treater). These dikes will be constructed of compacted subsoil, be impervious, hold 100% of the capacity of the largest tank and be independent of the back cut.

All permanent (on site for six months or longer) above the ground structures constructed or installed, including pumping units, will be painted a flat, non-reflective, earth tone color to match one of the standard environmental colors, as determined by the rocky Mountain Five State Inter-Agency Committee

All facilities will be painted within 6 months of installation. The color shall be Desert Tan. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded.

Any necessary pits will be properly fenced to protect livestock and prevent wildlife entry.

Gas Gathering Pipeline:	ON-LEASE	3,760'	SITLA
	OFF-LEASE	-0'	no OFF-LEASE pipeline

If the well is capable of economic production, a surface gas gathering line and related equipment shall be installed. The surface gas gathering line shall be in use year round. A total of approximately less than 710 feet of surface gas gathering pipeline shall be laid on the surface to minimize surface disturbance:

- a. ON-LEASE approximately 3,760 feet, and
- b. OFF-LEASE (none)
  1. 2,025' of the pipeline nearest the well will be 3 inch or less diameter steel, unpainted, welded gas gathering line is proposed, and
  2. The balance of the pipeline (1,735') will also be used by the Southam 10-25-12-32 Well and will also be 3 inch or less diameter steel, unpainted, welded gas gathering line.

The proposed pipeline will begin at the well site; and be laid on the surface next to the new access road going approximately 2,025' north, to the Southam 10-25-12-32 well pad, then the 3" line shall continue along lease road northeasterly and tie-in directly to an existing pipeline which runs north and south through this section.

The meter run will be housed. The gas gathering line will be buried or anchored down from the wellhead to the meter.

Upon plugging and abandonment, the gas gathering line will be removed and the disturbed area will be re-contoured and restored as near as practical to the original condition. If necessary, re-seeding operations will be performed after completion of other reclamation operations.

13

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

Whenever practical, water will be obtained from Enduring Resources LLC Water Right Number 49-2215 (\*See Townships of permitted Use below). If that source is not authorized, then one of the two following sources shall be used: Target Trucking Water User Claim #43-2195, or by Dalbo Inc. Water User Claim #43-8496.

\*Enduring Water Permit Townships of Use:

T10S-R22E	T11S-R22E	T12S-R22E
T10S-R23E	T11S-R23E	T12S-R23E
T10S-R24E	T11S-R24E	T12S-R24E

Water will be hauled to the location over the roads marked on "Topo" Maps "A" and "B."

No water well is to be drilled on this lease.

**6 Source of Construction Materials:**

Surface and subsoil materials in the immediate area will be utilized for location and access road construction.

Any gravel will be obtained from a commercial source; however, gravel sized rock debris associated with location and access road construction may be used as access road surfacing material.

**7. Methods of Handling Waste Materials:**

Drill cuttings will be contained and buried in the reserve pit.

Drilling fluids, including salts and chemicals, will be contained in the reserve pit will be removed and disposed of at an approved waste disposal facility within 120 days after drilling is terminated.

The reserve pit will be constructed on the location and will not be located within natural drainage, where a flood hazard exists or surface runoff will destroy or damage the pit walls. The reserve pit will be constructed so that it will not leak, break or allow discharge of liquids.

The reserve pit will be lined with ¼ felt and a minimum of 16 mm plastic with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash or scrap that could puncture the will be disposed of in the pit.

A chemical portable toilet will be furnished with the drilling rig. The toilet will be replaced periodically utilizing a licensed contractor to transport by truck the portable chemical toilet so that its contents can be delivered to the Vernal Wastewater Treatment Facility in accordance with state and county regulations.

Garbage, trash and other waste materials will be collected in a portable, self-contained, fully enclosed trash cage during operations. No trash will be burned on location.

All debris and other waste material not contained in the trash cage will be cleaned up and removed from the location immediately after removal of the drilling rig.

Any open pits will be fenced during the operations. The fencing will be maintained until such time as the pits are backfilled.

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

Produced oil will be stored in an oil tank and then hauled by truck to a crude purchaser facility. Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to an approved disposal site.

#### 8. **Ancillary Facilities:**

During drilling operations, approximately 20 days, the site will be a manned camp. Three or four additional trailers will be on location to serve as the crews' housing and eating facilities. These will be located on the perimeter of the pad site within the topsoil stockpiles. Refer to Sheet 4.

#### 9. **Well Site Layout: (Refer to Sheets #2, #3, and #4)**

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

Please see the attached diagram for rig orientation and access roads.

The top soil will be windrowed rather than piled. It will be reseeded and track walker at the time the location is constructed. Seeding will be with the determined during the onsite. (Refer to "Seed Mixture for Windrowed Top Soil Will included:" following herein.

The top soil removed from the pit area will be store separately and will not be reseeded until the pit is reclaimed.

All pits shall be fence to the following minimum standards:

- a. 39 inch net wire shall be used with at least one strand of barbed wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.

13

- b. The net wire shall be no more than 2 inches above the ground. The barbed wire shall be 3 inches over the new 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 fence posts shall be no greater than 16 feet.
- e. All wire shall be stretched by, using a stretching device, before it is attached to corner posts.
- f. The reserve pit fencing will be on three sides during drilling operations and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.
- g. Location size may change prior to drilling the well due to the current rig availability. If the proposed location is not large enough to accommodate the drilling, the location will be re-surveyed and a Form 9 will be submitted.

10. **Plans for Surface Reclamation:**

**Producing Location:**

- a. Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, materials, trash and debris not required for production.
- b. Immediately upon well completion, any hydrocarbons in the pit shall be removed in accordance with 40CFR 3162.7.
- c. Before any dirt work associated with location restoration takes place, the reserve pit shall be as dry as possible. All debris in it will be removed. Other waste and spoil materials will be disposed of immediately upon completion of operations.
- d. The reserve pit and that portion of the location not needed for production facilities/operations will be re-contoured to the approximated natural contours. The reserve pit will be reclaimed within 90 days from the date of well completion, weather permitting.
- e. To prevent surface water(s) from standing (ponding) on the reclaimed reserve pit area, final reclamation of the reserve pit will consist of "mounding" the surface 3 feet above surrounding round surface to allow the reclaimed pit area to drain effectively.
- f. Upon completion of back filling, leveling and re-contouring, the stockpiled topsoil will be spread evenly over the reclaimed area(s).

15

**Dry Hole/Abandoned Location:**

- i. Abandoned well sites, roads and other disturbed areas will be restored as nearly as practical to their original condition. Where applicable, these conditions include the re-establishment of irrigation systems, the re-establishment of appropriate soil conditions and re-establishment of vegetation as specified.
- ii. All disturbed surfaces will be re-contoured to the approximated natural contours with reclamation of the well pad and access road to be performed as soon as practical after final abandonment. If necessary, re-seeding operations will be performed after completion of other reclamation operations.

**Seed Mixture for Windrowed Top Soil Will Included:**

To be provided by the DOG&M and SITLA.

**11. Surface Ownership: Location, Access and Pipeline Route:**

Wellsite: SITLA

Access: SITLA

Pipeline: SITLA

**12. Other Information**

**On-site Inspection for Location, Access and Pipeline Route:**

To be scheduled by SITLA and DOG&M.

**Special Conditions of Approval:**

Tanks and Production Equipment shall be painted Desert Tan.

**Archeology:**

- a. A Cultural Resource Inventory Report is pending and to be prepared by Montgomery Archaeological Consultants.

**Paleontology:**

- a. A Paleontology Reconnaissance Report is pending and to be prepared by Intermountain Paleo-Consulting.

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.

13

13, **Lessee's or Operator's Representatives:**

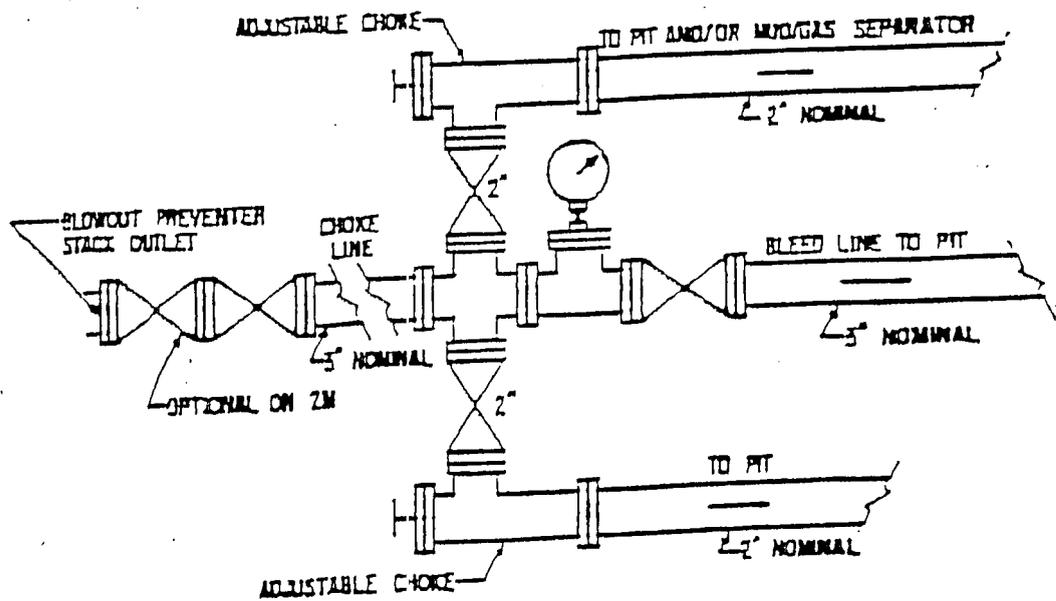
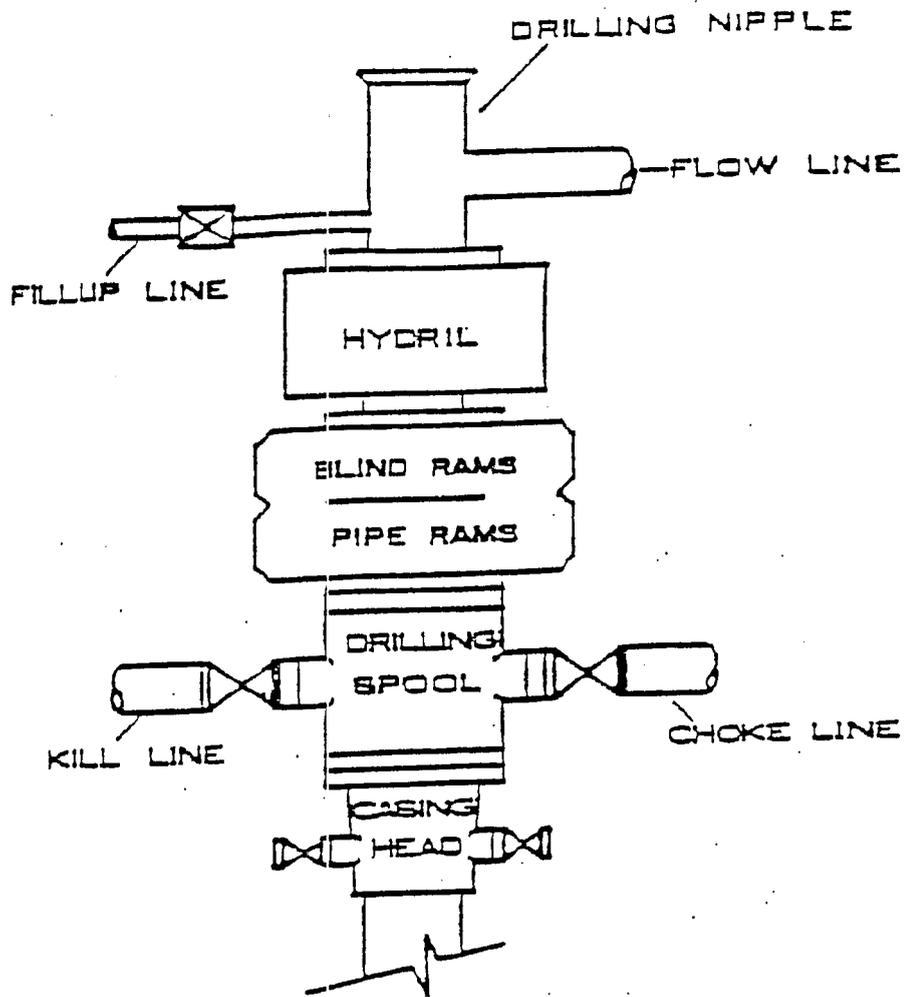
**Representatives:**

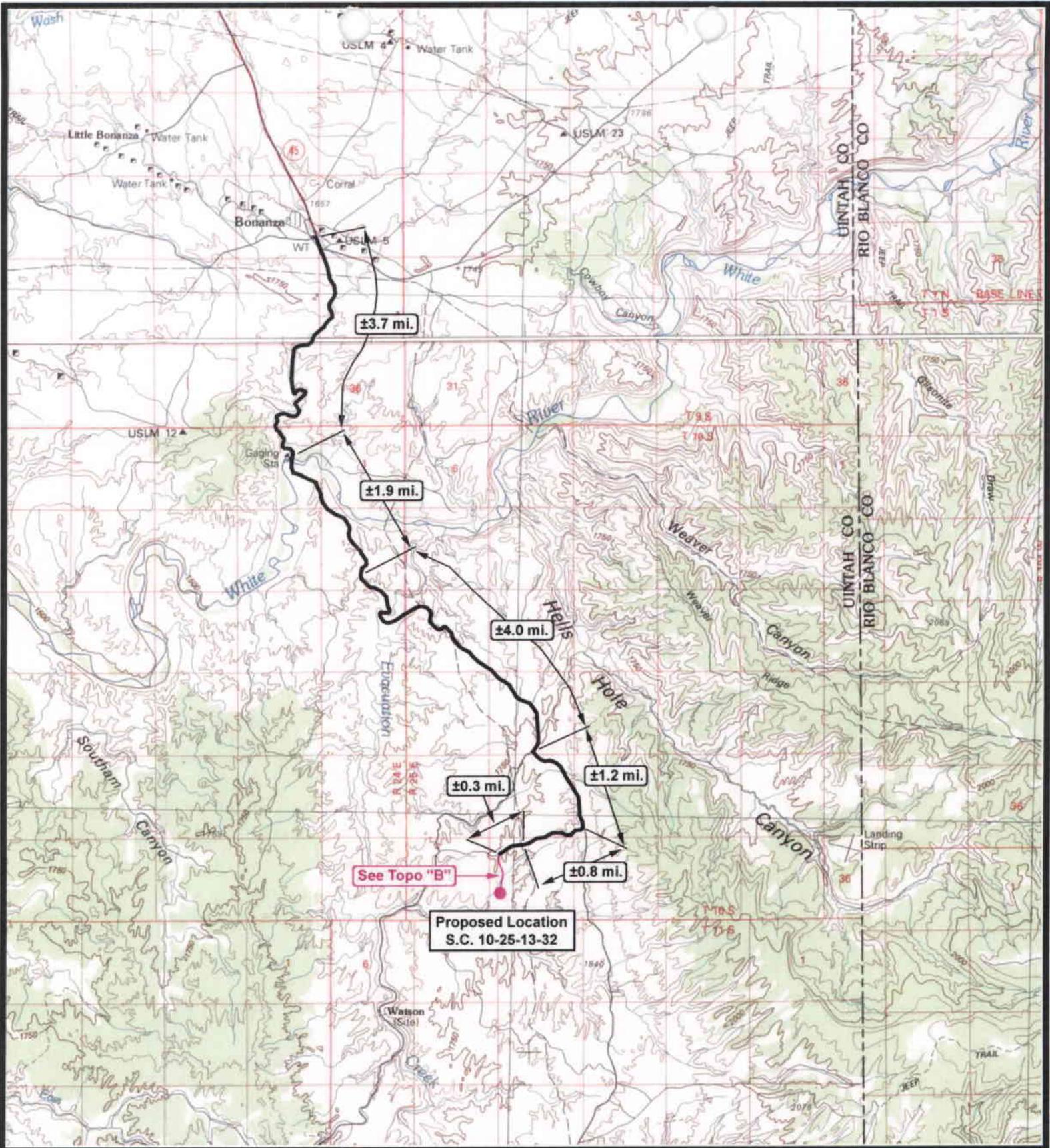
Alvin R. (Al) Arlian  
Landman – Regulatory Specialist  
Enduring Resources, LLC  
475 17<sup>th</sup> Street, Suite 1500  
Denver, Colorado 80202  
Office Tel: 303-350-5114  
Fax Tel: 303-573-0461  
[aarlian@enduringresources.com](mailto:aarlian@enduringresources.com)

Frank Hutto  
Vice President – Operations  
Enduring Resources, LLC  
475 17<sup>th</sup> Street, Suite 1500  
Denver, Colorado 80202  
Office Tel: 303-573-5102  
Fax Tel: 303-573-0461  
[fhutto@enduringresources.com](mailto:fhutto@enduringresources.com)

3,000 PSI

# BOP STACK





**ENDURING RESOURCES**

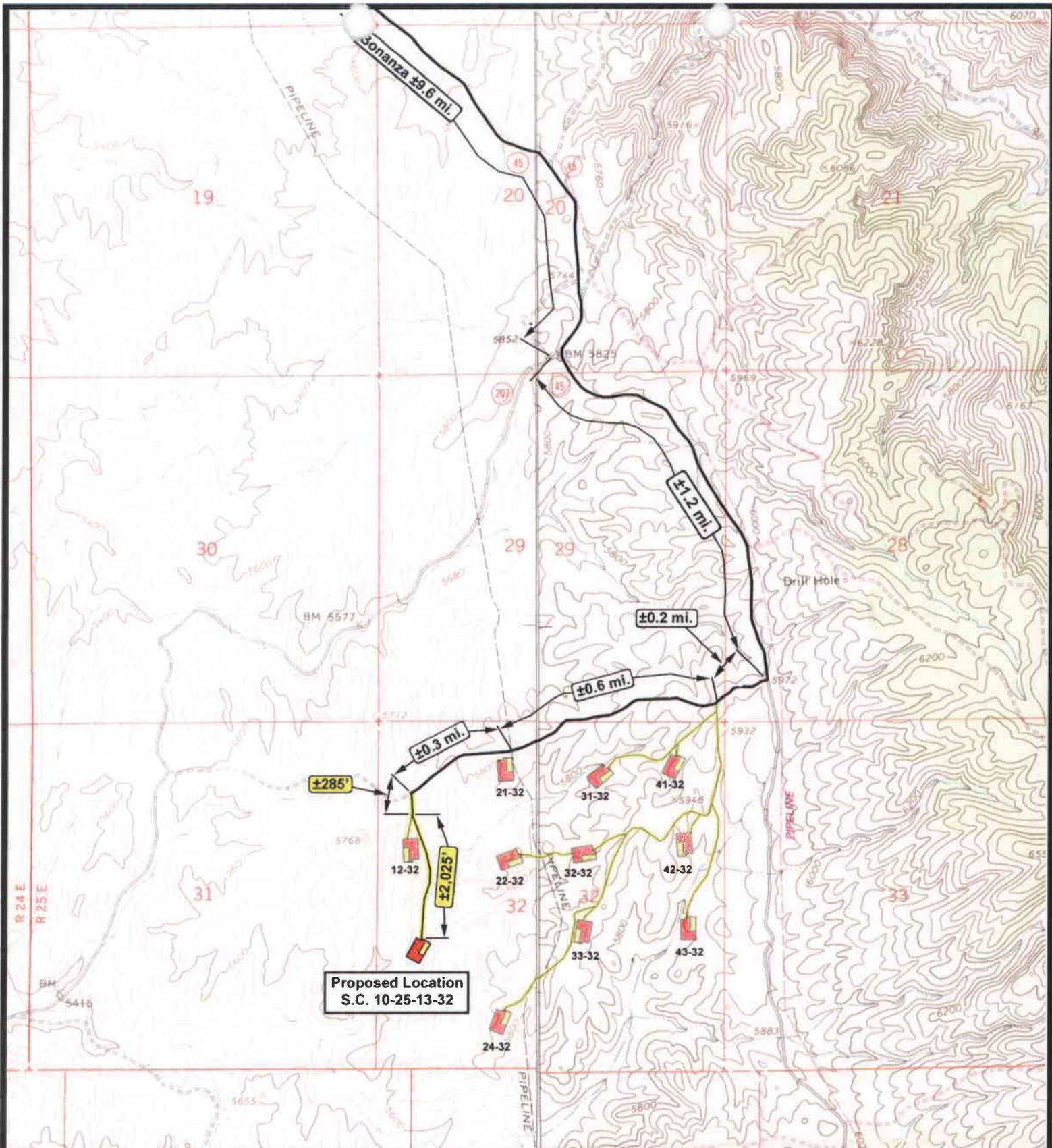
**Southam Canyon 10-25-13-32**  
**Sec. 32, T10S, R25E, S.L.B.&M.**



**Tri-State**  
*Land Surveying Inc.*  
 (435) 781-2501  
 180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1 = 100,000  
 DRAWN BY: bgm  
 DATE: 11-11-2005

<b>Legend</b>	
	Existing Road
	Proposed Access
<b>TOPOGRAPHIC MAP</b>	
<b>"A"</b>	<b>SHEET 6 OF 9</b>



**ENDURING RESOURCES**

**Southam Canyon 10-25-13-32  
Sec. 32, T10S, R25E, S.L.B.&M.**

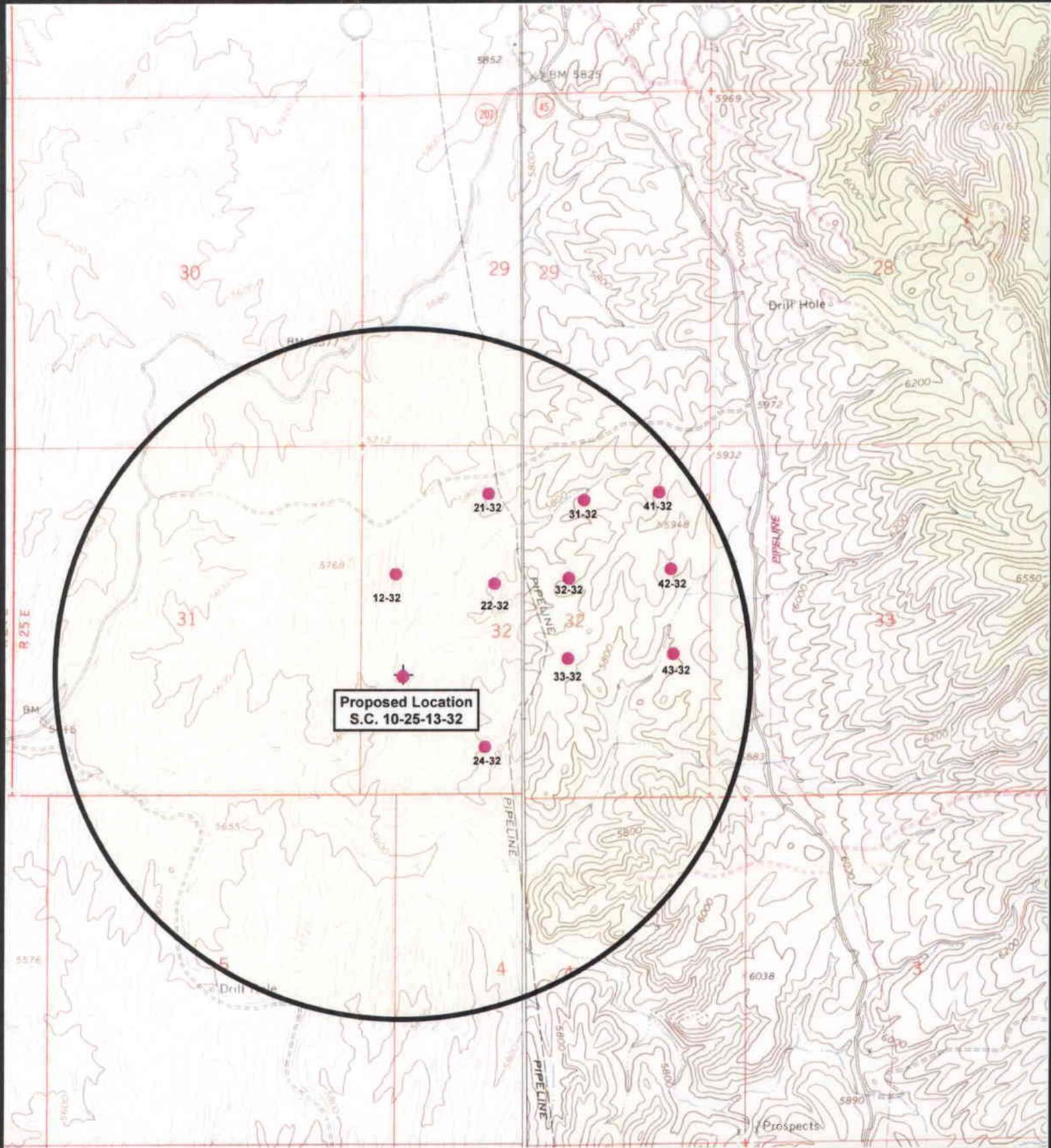


**Tri-State  
Land Surveying Inc.**  
(435) 781-2501  
180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1" = 2,000'  
DRAWN BY: bgm  
DATE: 11-11-2005

Legend	
	Existing Road
	Proposed Access

TOPOGRAPHIC MAP  
**"B"**  
SHEET **7** OF 9



**ENDURING RESOURCES**

**Southam Canyon 10-25-13-32  
Sec. 32, T10S, R25E, S.L.B.&M.**



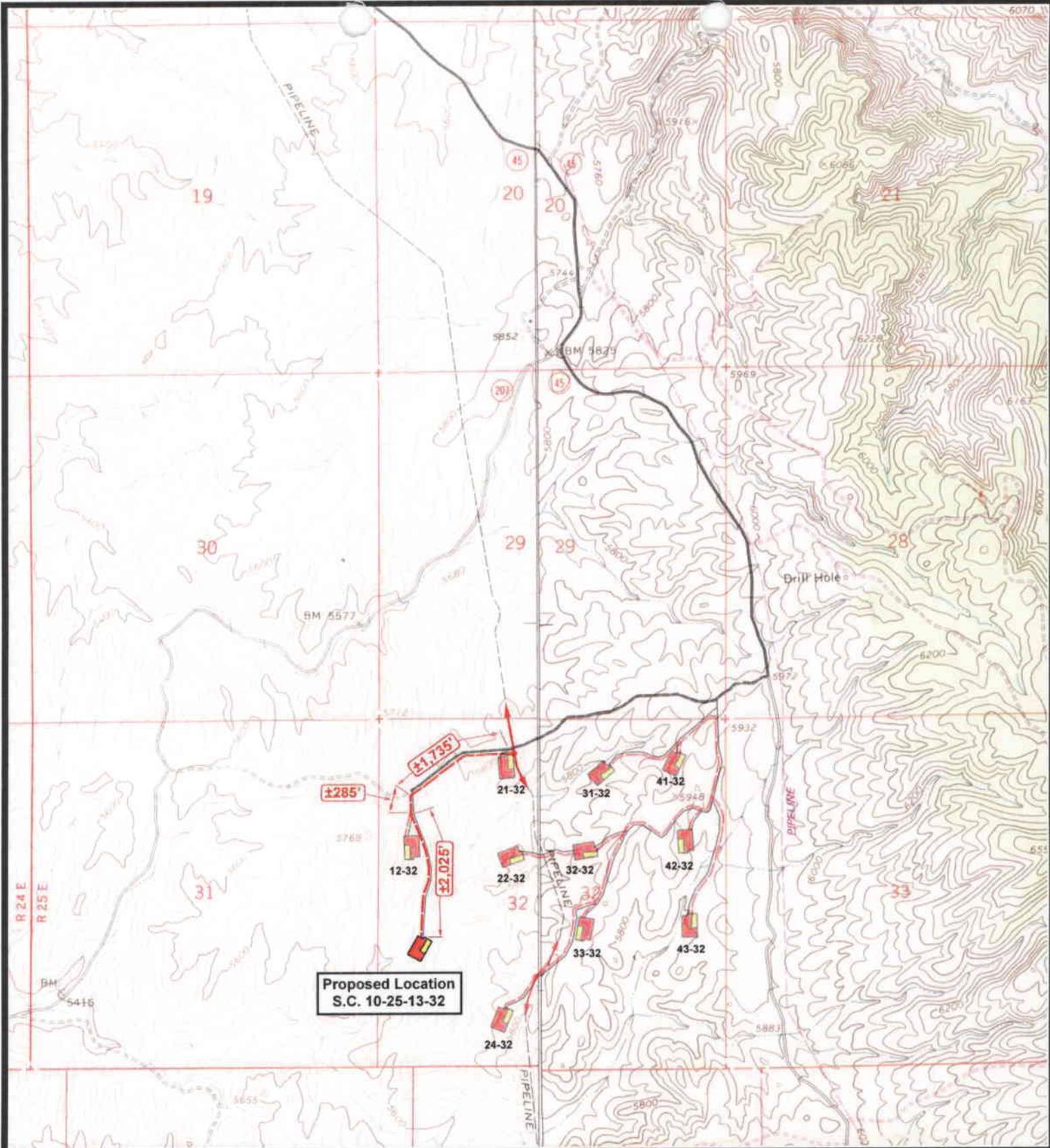
**Tri-State  
Land Surveying Inc.**  
(435) 781-2501  
180 North Vernal Ave. Vernal, Utah 84078

**SCALE: 1" = 2,000'**  
**DRAWN BY: bgm**  
**DATE: 11-14-2005**

**Legend**

- Location
- One-Mile Radius

**TOPOGRAPHIC MAP**  
**"C"**  
**SHEET 8 OF 9**



**ENDURING RESOURCES**

**Southam Canyon 10-25-13-32  
Sec. 32, T10S, R25E, S.L.B.&M.**



**Tri-State  
Land Surveying Inc.**  
(435) 781-2501  
180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1" = 2,000'  
DRAWN BY: bgm  
DATE: 11-15-2005

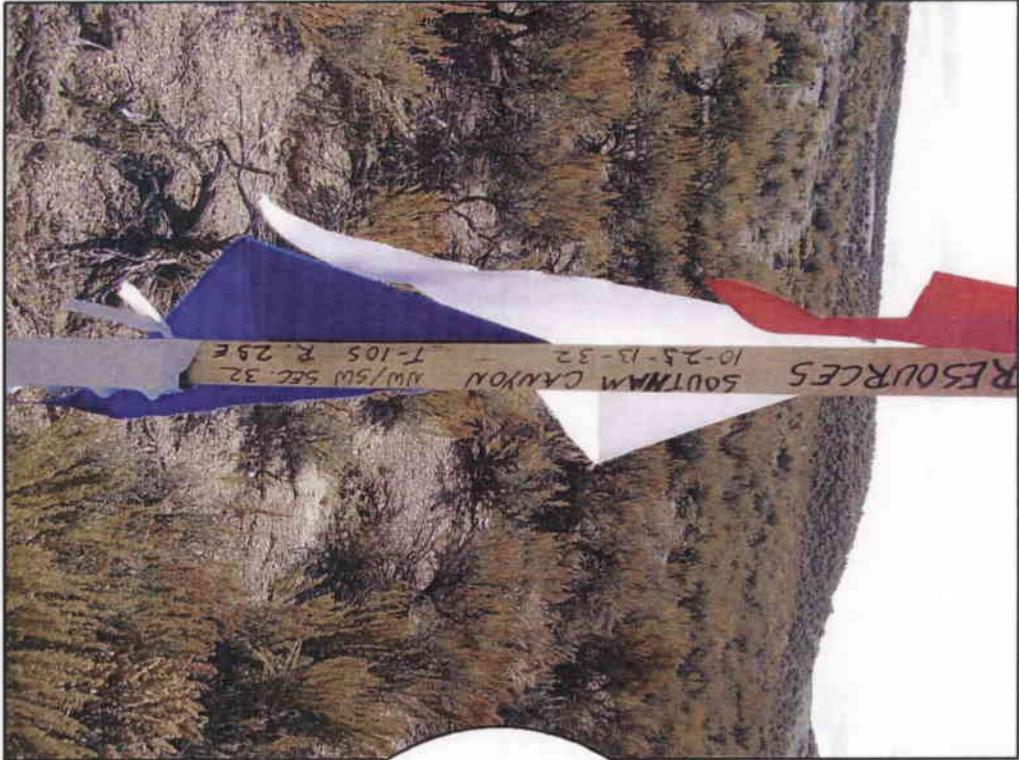
**Legend**

- Roads
- Existing Gas Line
- Proposed Gas Line

TOPOGRAPHIC MAP

**"D"**

SHEET  
**9**  
OF 9



**CENTER STAKE**

  
**ENDURING RESOURCES**  
**S.C. 10-25-13-32**

Date Photographed: 11/15/2005  
Date Drawn: 11/15/2005  
Drawn By: bgm

  
**Tri-State  
Land Surveying Inc.**  
(435) 781-2501  
180 North Vernal Ave. Vernal, Utah 84078

**LOOKING SOUTH  
ACCESS**





NORTH

  
ENDURING RESOURCES  
S.C. 10-25-13-32

Date Photographed: 11/15/2005  
Date Drawn: 11/15/2005  
Drawn By: bgm

  
*Tri-State  
Land Surveying Inc.*  
(435) 781-2501  
180 North Vernal Ave. Vernal, Utah 84078

EAST





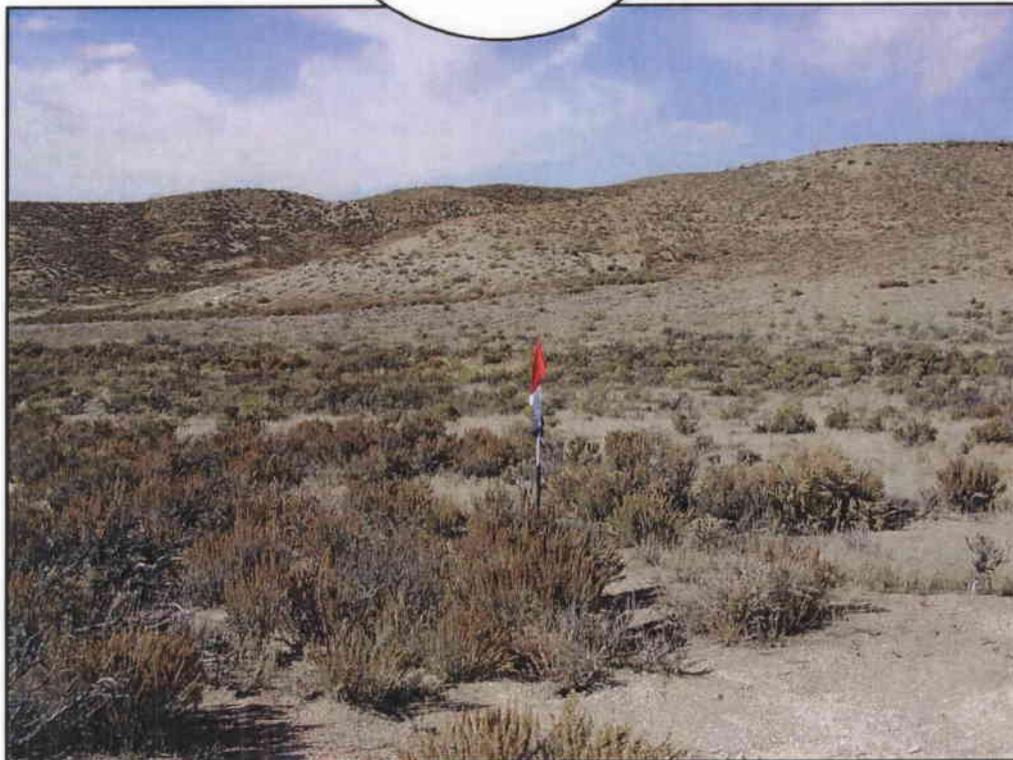
SOUTH

  
**ENDURING RESOURCES**  
**S.C. 10-25-13-32**

Date Photographed: 11/15/2005  
Date Drawn: 11/15/2005  
Drawn By: bgm

  
**Tri-State  
Land Surveying Inc.**  
(435) 781-2501  
180 North Vernal Ave. Vernal, Utah 84078

WEST



**WORKSHEET  
APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 02/17/2006

API NO. ASSIGNED: 43-047-37797

WELL NAME: SOUTHAM CYN 10-25-13-32  
 OPERATOR: ENDURING RESOURCES, LLC ( N2750 )  
 CONTACT: AL ARLIAN

PHONE NUMBER: 303-350-5114

PROPOSED LOCATION:

NWSW 32 100S 250E  
 SURFACE: 1801 FSL 0629 FWL  
 BOTTOM: 1801 FSL 0629 FWL  
 COUNTY: UINTAH  
 LATITUDE: 39.90305 LONGITUDE: -109.1315  
 UTM SURF EASTINGS: 659727 NORTHINGS: 4418458  
 FIELD NAME: WILDCAT ( 1 )

INSPECT LOCATN BY: / /		
Tech Review	Initials	Date
Engineering	DKD	3/21/06
Geology		
Surface		

LEASE TYPE: 3 - State  
 LEASE NUMBER: ML-47065  
 SURFACE OWNER: 3 - State

PROPOSED FORMATION: MVRD  
 COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

- Plat
- Bond: Fed[] Ind[] Sta[] Fee[]  
(No. PLB0008031 )
- Potash (Y/N)
- Oil Shale 190-5 (B) or 190-3 or 190-13
- Water Permit  
(No. 43-8496 )
- RDCC Review (Y/N) \*  
(Date: 03/08/2006 )
- Fee Surf Agreement (Y/N)
- Intent to Commingle (Y/N)

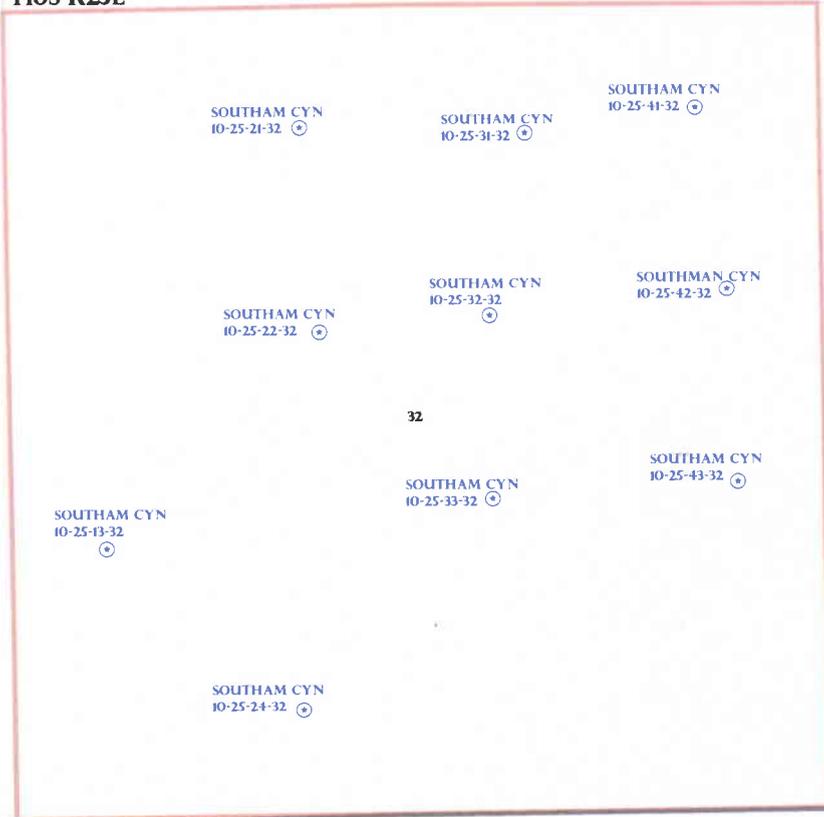
LOCATION AND SITING:

- 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: Needs Permit (03-07-06)

STIPULATIONS: 1- Spacing Strip  
2- STATEMENT OF BASIS  
3- Surface (sq) Cont Strip

T10S R25E



T11S R25E

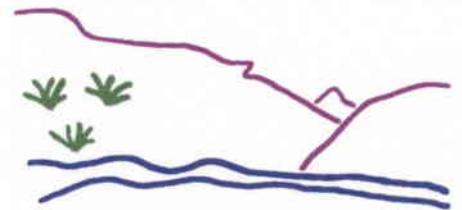
OPERATOR: ENDURING RES LLC (N2750)

SEC: 32 T. 10S R. 25E

FIELD: WILDCAT (001)

COUNTY: UINTAH

SPACING: R649-3-2 / GENERAL SITING



Utah Oil Gas and Mining



PREPARED BY: DIANA WHITNEY  
DATE: 21-FEBRUARY-2006

- Field Status**
- ABANDONED
  - ACTIVE
  - COMBINED
  - INACTIVE
  - PROPOSED
  - STORAGE
  - TERMINATED

- Unit Status**
- EXPLORATORY
  - GAS STORAGE
  - NF PP OIL
  - NF SECONDARY
  - PENDING
  - PI OIL
  - 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

**DIVISION OF OIL, GAS AND MINING  
APPLICATION FOR PERMIT TO DRILL  
STATEMENT OF BASIS**

OPERATOR: ENDURING RESOURCES, LLC.  
WELL NAME & NUMBER: SOUTHAM CANYON 10-25-13-32  
API NUMBER: 43-047-37797  
LOCATION: 1/4, 1/4 NWSW Sec: 32 TWP: 10S RNG: 25E 1801' FSL 629' FWL

**Geology/Ground Water:**

Enduring 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 3,100'. A search of Division of Water Rights records shows no water well within a 10,000 foot radius of the center of Section 32. The surface formation at this site is the Uinta-Green River Formation transition. The Uinta Formation is made up of lenticular sandstones interbedded with shales and is expected to have limited value as an aquifer. The Green river Formation should be found near the surface. The Green River Formation may contain useable aquifers but they should be adequately protected by the proposed casing and cementing program. The production casing cement should be brought above the base of the moderately saline ground water to isolate it from fresher waters up hole.

**Reviewer:** Brad Hill **Date:** 03-14-06

**Surface:**

The pre-drill investigation of the surface was performed on 03/07/2006. This site is on state surface, with state minerals. Due to harsh weather, Jim Davis from SITLA was not present but expressed that the pre-sites should still take place in his absence. Doug Hammond expressed willingness and desire to paint the location tanks in a color to closely match the surroundings. Mr. Hammond asked if it would be okay to move the location fifty feet to the north-west to avoid taking a very large cut from a hill on the east side of the location. A small drainage will need to be rerouted, but it appeared that this would be a reasonable site adjustment. Mr. Hammond agreed to resubmit the changes. Ben Williams of DWR stated that this section is classified as critical deer and substantial elk winter range. Because of the critical deer classification, Mr. Williams requested that the location be closed to drilling and construction from November 15 to April 15.

**Reviewer:** Richard Powell **Date:** 03/07/2006

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

1. A synthetic liner with a minimum thickness of 12 mils shall be properly installed and maintained in the reserve pit.

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

**OPERATOR:** ENDURING RESOURCES, LLC  
**WELL NAME & NUMBER:** SOUTHAM CANYON 10-25-13-32  
**API NUMBER:** 43-047-37797  
**LEASE:** ML-47065      **FIELD/UNIT:** UNDESIGNATED  
**LOCATION:** 1/4,1/4 NWSW Sec: 32 TWP: 10S RNG: 25E 1801' FSL 629' FWL  
**LEGAL WELL SITING:** 460 F SEC. LINE; 460 F 1/4,1/4 LINE; 460 F ANOTHER WELL.  
**GPS COORD (UTM):** 4418458Y 0659727X      **SURFACE OWNER:** SITLA.

**PARTICIPANTS**

Richard Powell (DOGM), Doug Hammond (Enduring Resources), Larry Rowell (Ponderosa Oilfield Service), Chris Stewart & Dustin Laub (TriState Land Surveying).

**REGIONAL/LOCAL SETTING & TOPOGRAPHY**

Location is set in a bowl surrounded by low-lying hills with some exposed rock on the hilltops. Hills and ridges dominate the terrain of this section, with rock formations protruding from the tops of many of the slopes. The slopes of the western half of this section are much more gradual. The ridges generally seem to run from north to south. Drainage is westward to Evacuation Creek. To the east of this section, are much taller and steeper slopes. Bonanza, UT is approximately 11 miles to the north.

**SURFACE USE PLAN**

**CURRENT SURFACE USE:** Wildlife & Livestock grazing.

**PROPOSED SURFACE DISTURBANCE:** Location will be 355' by 250'. Proposed new access road to be approximately 2310'. The last 2,025' is for this well only; the first 285' is shared as part of the access to the proposed Southam Canyon 10-25-12-32.

**LOCATION OF EXISTING WELLS WITHIN A 1-MILE RADIUS:** See attached map from GIS database.

**LOCATION OF PRODUCTION FACILITIES AND PIPELINES:** All production facilities will be on location and added after drilling well. Pipeline to follow access road.

**SOURCE OF CONSTRUCTION MATERIAL:** All construction material will be borrowed from site during construction of location.

**ANCILLARY FACILITIES:** None will be required.

**WILL DRILLING AT THIS LOCATION GENERATE PUBLIC INTEREST OF CONCERNS? (EXPLAIN):** Unlikely.

**WASTE MANAGEMENT PLAN:** —

Drilled cuttings will be settled into reserve pit. Liquids from pit will be allowed to evaporate. Formation water will be confined to storage tanks. Portable toilets, sewage holding tanks, and onsite sewage treatment equipment will be handled by commercial contractors and regulated by the appropriate health authority. Trash will be contained in trash baskets and disposed of at an approved landfill.

**ENVIRONMENTAL PARAMETERS**

AFFECTED FLOODPLAINS AND/OR WETLANDS: none

FLORA/FAUNA: Sagebrush, Greasewood, shad scale, spiny hopsage / Deer, elk, Rodents, Coyote, Songbirds, Rabbit, Bobcat, Pronghorn, Cougar.

SOIL TYPE AND CHARACTERISTICS: Light brown silty clay with scattered rock and shale.

EROSION/SEDIMENTATION/STABILITY: Very little natural erosion. Sedimentation and stability are not a problem and location construction shouldn't cause an increase in stability or erosion problems.

PALEONTOLOGICAL POTENTIAL: Paleontology study by IPC on 3/1/06.

**RESERVE PIT**

CHARACTERISTICS: 215' BY 75' and twelve feet deep.

LINER REQUIREMENTS (Site Ranking Form attached): A liner will be required for reserve pit. Site ranking score is 25.

**SURFACE RESTORATION/RECLAMATION PLAN**

As per SITLA.

SURFACE AGREEMENT: As per SITLA.

CULTURAL RESOURCES/ARCHAEOLOGY: Archaeology study done by MOAC on 2/20/06.

**OTHER OBSERVATIONS/COMMENTS**

Doug Hammond requested that this location be moved 50 feet to the north-west to avoid taking a very large cut of a hill on the east side of the location. This will make it necessary to reroute a small wash, but appeared to be a reasonable and perhaps preferable change. Doug and the Surveyors both stated that a new layout would be submitted.

**ATTACHMENTS**

Photos of this site were taken and placed on file.

RICHARD POWELL  
DOGM REPRESENTATIVE

03/07/06 01:00 PM  
DATE/TIME

**Evaluation Ranking Criteria and Ranking Score  
For Reserve and Onsite Pit Liner Requirements**

<u>Site-Specific Factors</u>	<u>Ranking</u>	<u>Site Ranking</u>
Distance to Groundwater (feet)		
>200	0	
100 to 200	5	
75 to 100	10	
25 to 75	15	
<25 or recharge area	20	<u>0</u>
Distance to Surf. Water (feet)		
>1000	0	
300 to 1000	2	
200 to 300	10	
100 to 200	15	
< 100	20	<u>0</u>
Distance to Nearest Municipal Well (feet)		
>5280	0	
1320 to 5280	5	
500 to 1320	10	
<500	20	<u>0</u>
Distance to Other Wells (feet)		
>1320	0	
300 to 1320	10	
<300	20	<u>0</u>
Native Soil Type		
Low permeability	0	
Mod. permeability	10	
High permeability	20	<u>20</u>
Fluid Type		
Air/mist	0	
Fresh Water	5	
TDS >5000 and <10000	10	
TDS >10000 or Oil Base Mud Fluid	15	
containing significant levels of hazardous constituents	20	<u>5</u>
Drill Cuttings		
Normal Rock	0	
Salt or detrimental	10	<u>0</u>
Annual Precipitation (inches)		
<10	0	
10 to 20	5	
>20	10	<u>0</u>
Affected Populations		
<10	0	
10 to 30	6	
30 to 50	8	
>50	10	<u>0</u>
Presence of Nearby Utility		
Conduits		
Not Present	0	
Unknown	10	
Present	15	<u>0</u>

**Final Score**      25      (Level I Sensitivity)

Sensitivity Level I = 20 or more; total containment is required.  
Sensitivity Level II = 15-19; lining is discretionary.  
Sensitivity Level III = below 15; no specific lining is required.



03.07.2008 07:16



03.07.2008 07:16



03.07.2008 07:15

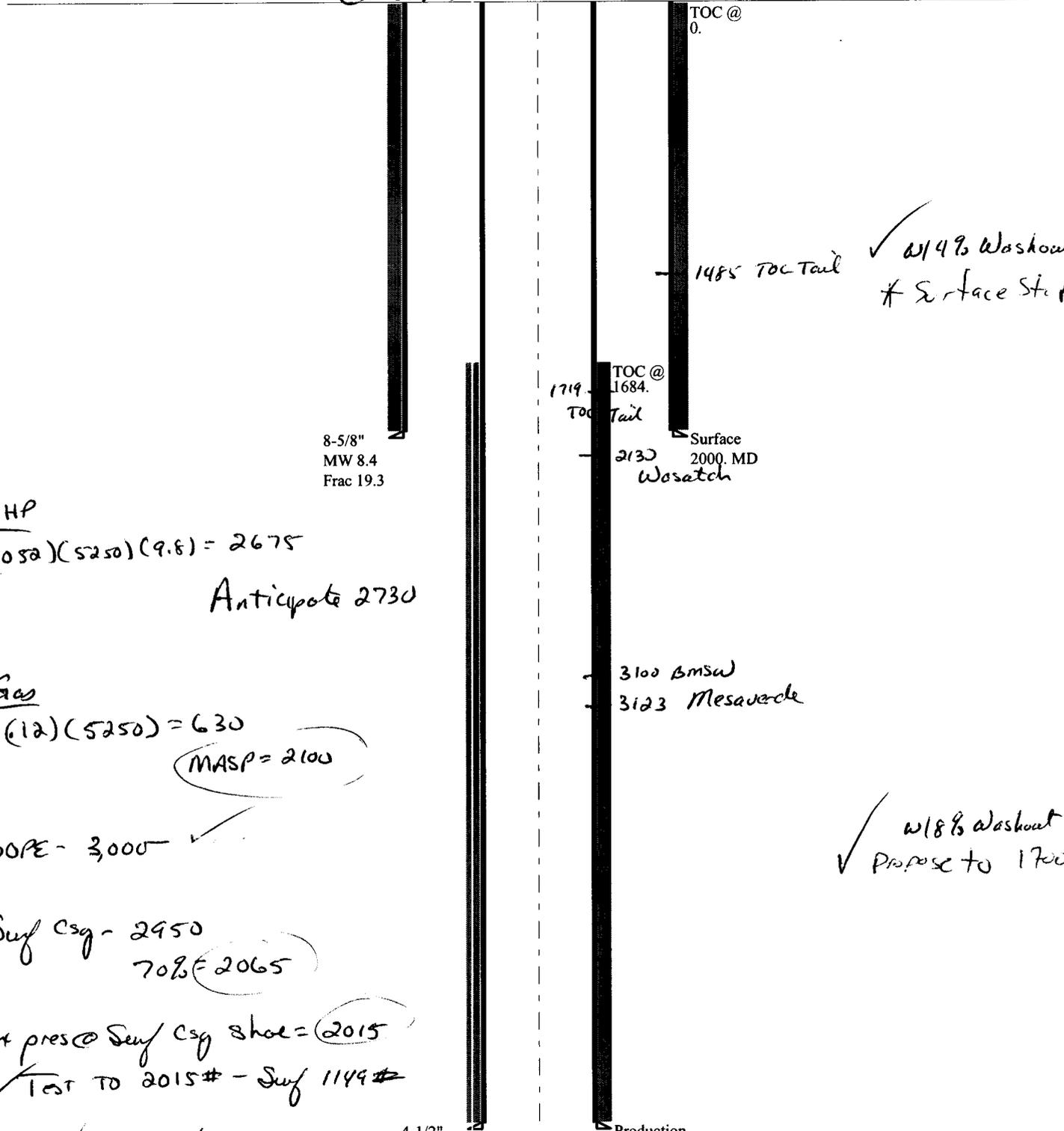


03.07.2008 07:15

Casing Schematic

Green River

Surface



✓ w/4% Washout  
# Surface Strip

✓ w/8% Washout  
Propose to 1700'

BHP  
 $(.052)(5250)(9.8) = 2675$   
 Anticipate 2730

Gas  
 $(.12)(5250) = 630$   
 (MASP = 2100)

BOPE - 3000 ✓

Surf Csg - 2950  
 70% = 2065

Max pres @ Surf Csg shoe = 2015  
 ✓ Test to 2015# - Surf 1149#

✓ Adequate D/K/D 3/21/06

8-5/8"  
 MW 8.4  
 Frac 19.3

1719.  
 TOC Tail  
 TOC @  
 1684.

Surface  
 2130 2000. MD  
 Washach

3100 BMSW  
 3123 Mesaverde

4-1/2"  
 MW 9.8

Production  
 5250. MD

Well name:	<b>03-06 Enduring Southam Cyn 10-25-13-32</b>	
Operator:	<b>Enduring Resources, LLC</b>	Project ID:
String type:	Surface	43-047-37797
Location:	Uintah County	

<b>Design parameters:</b>	<b>Minimum design factors:</b>	<b>Environment:</b>
<b>Collapse</b>	<b>Collapse:</b>	H2S considered? No
Mud weight: 8.400 ppg	Design factor 1.125	Surface temperature: 65 °F
Design is based on evacuated pipe.		Bottom hole temperature: 93 °F
		Temperature gradient: 1.40 °F/100ft
		Minimum section length: 250 ft
	<b>Burst:</b>	Cement top: 0 ft
	Design factor 1.00	
<b>Burst</b>		
Max anticipated surface pressure: 1,760 psi	<b>Tension:</b>	Non-directional string.
Internal gradient: 0.120 psi/ft	8 Round STC: 1.80 (J)	
Calculated BHP 2,000 psi	8 Round LTC: 1.80 (J)	
No backup mud specified.	Buttress: 1.60 (J)	
	Premium: 1.50 (J)	
	Body yield: 1.50 (B)	<b>Re subsequent strings:</b>
	Tension is based on buoyed weight.	Next setting depth: 5,250 ft
	Neutral point: 1,747 ft	Next mud weight: 9.800 ppg
		Next setting BHP: 2,673 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 (ft³)
1	2000	8.625	24.00	J-55	ST&C	2000	2000	7.972	96.3
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	873	1370	1.570	2000	2950	1.48	42	244	5.82 J

Prepared by: Clinton Dworshak  
Utah Div. of Oil & Mining

Phone: 801-538-5280  
FAX: 810-359-3940

Date: March 15, 2006  
Salt Lake City, Utah

Remarks:  
Collapse is based on a vertical depth of 2000 ft, a mud weight of 8.4 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

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

Well name:	<b>03-06 Enduring Southam Cyn 10-25-13-32</b>		
Operator:	<b>Enduring Resources, LLC</b>		
String type:	Production	Project ID:	43-047-37797
Location:	Uintah County		

**Design parameters:**

**Collapse**

Mud weight: 9.800 ppg  
 Design is based on evacuated pipe.

**Burst**

Max anticipated surface pressure: 2,043 psi  
 Internal gradient: 0.120 psi/ft  
 Calculated BHP: 2,673 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.  
 Neutra point: 4,481 ft

**Environment:**

H2S considered? No  
 Surface temperature: 65 °F  
 Bottom hole temperature: 138 °F  
 Temperature gradient: 1.40 °F/100ft  
 Minimum section length: 1,500 ft

Cement top: 1,684 ft

Non-directional string.

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	5250	4.5	11.60	N-80	LT&C	5250	5250	3.875	121.7
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	2673	6350	2.376	2673	7780	2.91	52	223	4.29 J

Prepared by: Clinton Dworshak  
 Utah Div. of Oil & Mining

Phone: 801-538-5280  
 FAX: 810-359-3940

Date: March 15, 2006  
 Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 5250 ft, a mud weight of 9.8 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.*

**STATE ACTIONS**  
**Resource Development Coordinating Committee**  
**Governor's Office of Planning and Budget**  
**5110 State Office Building**  
**SLC, UT 84114**  
**Phone No. 537-9230**

<b>1. State Agency</b> Oil, Gas and Mining 1594 West North Temple, Suite 1210 Salt Lake City, UT 84114-5801	<b>2. Approximate date project will start:</b>  Upon Approval or March 7, 2006
<b>3. Title of proposed action:</b> Application for Permit to Drill	
<b>4. Description of Project:</b>  Enduring Resources LLC proposes to drill the Southam Canyon 10-25-13-32 well (wildcat) on a State lease ML-47065, Uintah County, Utah. This action is being presented to the RDCC for consideration of resource issues affecting state interests. The Division of Oil, Gas and Mining is the primary administrative agency in this action and must issue approval before operations commence.	
<b>5. Location and detailed map of land affected (site location map required, electronic GIS map preferred)</b> (include UTM coordinates where possible) (indicate county) 1801' FSL 629' FWL, NW/4 SW/4, Section 32, Township 10 South, Range 25 East, Uintah County, Utah	
<b>6. Possible significant impacts likely to occur:</b> Surface impacts include up to five acres of surface disturbance during the drilling and completion phase (estimated for five weeks duration). If oil and gas in commercial quantities is discovered, the location will be reclaimed back to a net disturbance of between one and two acres – not including road, pipeline, or utility infrastructure. If no oil or gas is discovered, the location will be completely reclaimed.	
<b>7. Identify local government affected</b> a. Has the government been contacted? No. b. When? c. What was the response? d. If no response, how is the local government(s) likely to be impacted?	
<b>8. For acquisitions of land or interests in land by DWR or State Parks please identify state representative and state senator for the project area. Name and phone number of state representative, state senator near project site, if applicable:</b> a. Has the representative and senator been contacted? N/A	
<b>9. Areawide clearinghouse(s) receiving state action:</b> (to be sent out by agency in block 1) Uintah Basin Association of Governments	
<b>10. For further information, contact:</b>   Diana Whitney <b>Phone:</b> (801) 538-5312	<b>11. Signature and title of authorized officer</b>   Gil Hunt, Associate Director <b>Date:</b> February 21, 2006

## MEMORANDUM

DATE: March 6, 2006

TO: Utah Division of Oil, Gas and Mining

FROM: Utah Geological Survey, Ground Water and Paleontology Program

CC: Resource Development Coordinating Committee

SUBJECT: UGS comments on RDCC short turn around items 6282, 6283, 6284, 6285, and 6287

6282. Division of Oil, Gas and Mining  
Short Turn Around Drilling Permit  
Sec. 32, T10S, R25E, Uintah County  
Application for Permit to Drill - proposal to drill a wildcat well the Southam Canyon 10-25-32-32 on a State lease ML-47065

Although there are no paleontological localities recorded in our files for this project area, the Eocene and Green River Formations that are exposed here have the potential for yielding significant vertebrate fossils. The office of the State Paleontologist therefore recommends that a paleontological evaluation be conducted for this project.

6283. Division of Oil, Gas and Mining  
Short Turn Around Drilling Permit  
Sec. 32, T10S, R25E, Uintah County  
Application for Permit to Drill - proposal to drill a wildcat well the Southam Canyon 10-22-32-32 on a State lease ML-47065

Although there are no paleontological localities recorded in our files for this project area, the Eocene and Green River Formations that are exposed here have the potential for yielding significant vertebrate fossils. The office of the State Paleontologist therefore recommends that a paleontological evaluation be conducted for this project.

6284. Division of Oil, Gas and Mining  
Short Turn Around Drilling Permit  
Sec. 32, T10S, R25E, Uintah County  
Application for Permit to Drill - proposal to drill a wildcat well the Southam Canyon 10-25-31-32 on a State lease ML-47065

Although there are no paleontological localities recorded in our files for this project area,

the Eocene and Green River Formations that are exposed here have the potential for yielding significant vertebrate fossils. The office of the State Paleontologist therefore recommends that a paleontological evaluation be conducted for this project.

6285. Division of Oil, Gas and Mining  
Short Turn Around Drilling Permit  
Sec. 32, T10S, R25E, Uintah County  
Application for Permit to Drill - proposal to drill a wildcat well the Southam Canyon 10-25-24-32 on a State lease ML-47065

Although there are no paleontological localities recorded in our files for this project area, the Eocene and Green River Formations that are exposed here have the potential for yielding significant vertebrate fossils. The office of the State Paleontologist therefore recommends that a paleontological evaluation be conducted for this project.

6287. Division of Oil, Gas and Mining  
Short Turn Around Drilling Permit  
Sec. 32, T10S, R25E, Uintah County  
Application for Permit to Drill - proposal to drill a wildcat well the Southam Canyon 10-25-13-32 on a State lease ML-47065

Although there are no paleontological localities recorded in our files for this project area, the Eocene and Green River Formations that are exposed here have the potential for yielding significant vertebrate fossils. The office of the State Paleontologist therefore recommends that a paleontological evaluation be conducted for this project.

**From:** Robert Clark  
**To:** Whitney, Diana  
**Date:** 3/7/2006 8:31:33 AM  
**Subject:** RDCC short turn around responses

The following comments are provided in response to **RDCC #6282 - RDCC #6285 and RDCC #6287**. The same comments pertain to all five Enduring Resources LLC projects.

**Comments begin:** The proposed Enduring Resources LLC well drilling project, in Uintah County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board. If any compressor or pump stations are constructed at the site, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The proposed project is also subject to Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm). **Comments end.** The following comments are provided in response to **RDCC #6286**.

**Comments begin:** The proposed Tidewater Oil & Gas Company LLC well drilling project, in Grand County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board. If any compressor or pump stations are constructed at the site, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The proposed project is also subject to Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm). **Comments end.** Robert Clark Division of Air Quality536-4435

**CC:** Mcneill, Dave; Wright, Carolyn

**From:** Ed Bonner  
**To:** Whitney, Diana  
**Date:** 3/27/2006 10:24:45 AM  
**Subject:** Well Clearance

The following wells have been given cultural resource clearance by the Trust Lands Cultural Resources Group:

**ConocoPhillips Company**

Utah 33-1074  
Utah 04-1139  
Utah 08-1148  
Utah 10-1154  
Utah 10-1155  
Utah 10-1156  
Utah 36-1012  
Utah 31-1068  
Utah 17-1176  
Utah 18-1178  
Utah 18-1179  
Utah 05-1142  
Utah 33-1072

**Enduring Resources, LLC**

Southam Canyon 10-25-12-32  
Southam Canyon 10-25-13-32  
Southam Canyon 10-25-22-32  
Southam Canyon 10-25-24-32  
Southam Canyon 10-25-31-32  
Southam Canyon 10-25-32-32  
Southam Canyon 10-25-33-32  
Southam Canyon 10-25-41-32  
Southam Canyon 10-25-42-32  
Southam Canyon 10-25-43-32  
Rock House 11-23-42-2  
Rock House 11-23-22-2

**EOG Resources, Inc**

Chapita Wells Unit 1173-2  
Chapita Wells Unit 1175-2

**The Houston Exploration Company**

North Horseshoe 3-16-6-21  
North Horseshoe 7-16-6-21  
North Horseshoe 9-16-6-21  
North Horseshoe 15-16-6-21  
North Horseshoe 11-16-6-21  
Significant site along pipeline/access road must be avoided.  
Recommendations of arch consultant must be followed.

If you have any questions regarding this matter please give me a call.

**CC:** Davis, Jim; Garrison, LaVonne; Hill, Brad; Hunt, Gil



**State of Utah**

**Department of  
Natural Resources**

MICHAEL R. STYLER  
*Executive Director*

**Division of  
Oil, Gas & Mining**

JOHN R. BAZA  
*Division Director*

JON M. HUNTSMAN, JR.  
*Governor*

GARY R. HERBERT  
*Lieutenant Governor*

March 27, 2006

Enduring Resources, LLC  
475 17th St., Ste. 1500  
Denver, CO 80202

Re: Southam Canyon 10-25-13-32 Well, 1801' FSL, 629' FWL, NW SW, Sec. 32,  
T. 10 South, R. 25 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 43-047-37797.

Sincerely,

Gil Hunt  
Associate Director

pab  
Enclosures

cc: Uintah County Assessor  
SITLA

**Operator:** Enduring Resources, LLC  
**Well Name & Number** Southam Canyon 10-25-13-32  
**API Number:** 43-047-37797  
**Lease:** ML-47065

**Location:** NW SW      **Sec.** 32      **T.** 10 South      **R.** 25 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:

- 24 hours prior to cementing or testing casing
- 24 hours prior to testing blowout prevention equipment
- 24 hours prior to spudding the well
- within 24 hours of any emergency changes made to the approved drilling program
- prior to commencing operations to plug and abandon the well

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

- Dan Jarvis at (801) 538-5338
- Carol Daniels at (801) 538-5284 (spud)

3. **Reporting Requirements**

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

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

5. 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.
6. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)
7. Operator shall comply with applicable recommendations resulting from Resource Development Coordinating Committee review. Statements attached.
8. Surface casing shall be cemented to the surface.





**Application for Permit to Drill  
Request for Permit Extension  
Validation**

(this form should accompany the Sundry Notice requesting permit extension)

**API:** 4304737797  
**Well Name:** Southam Canyon 10-25-13-32  
**Location:** 1801' FSL - 629' FWL, NWSW, Sec 32, T10S-R25E  
**Company Permit Issued to:** Enduring Resources, LLC  
**Date Original Permit Issued:** 3/27/2006

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 right-of-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

*Walter Bissett*  
Signature

5/23/2006  
Date

**Title:** Regulatory Affairs Assistant

**Representing:** Enduring Resources, LLC

**RECEIVED  
JAN 12 2007**

DIV. OF OIL, GAS & MINING

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

FORM 9

5. LEASE DESIGNATION AND SERIAL NUMBER:  
**ML-47065**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:  
**n/a**

7. UNIT or CA AGREEMENT NAME:  
**n/a**

8. WELL NAME and NUMBER:  
**Southam Canyon 10-25-13-32**

9. API NUMBER:  
**4304737797**

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

**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:  
**Enduring Resources, LLC**

3. ADDRESS OF OPERATOR:      PHONE NUMBER:  
**475 17th Street, Suite 1500      Denver      CO      80202      (303) 350-5719**

4. LOCATION OF WELL

FOOTAGES AT SURFACE: **1801' FSL - 629' FWL**      COUNTY: **Uintah**

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: **NWSW 32 10S 25E S**      STATE: **UTAH**

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" 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"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<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 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"/> 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 checked="" type="checkbox"/> OTHER: <b>Request for APD Extension</b>
	<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.

Enduring Resources, LLC respectfully request an extension to the expiration date of this Application for Permit to Drill ....

FROM: 1-17-2008

TO: 1-17-2009

Approved by the  
 Utah Division of  
 Oil, Gas and Mining

**COPY SENT TO OPERATOR**

Date: 1-22-2008

Initials: KS

Date: 01-17-08  
 By: [Signature]

NAME (PLEASE PRINT) Alvin R. (Al) Arlian      TITLE Landman - Regulatory Specialist

SIGNATURE [Signature]      DATE 1/8/2008

(This space for State use only)

**RECEIVED**  
**JAN 16 2008**  
 DIV. OF OIL, GAS & MINING



**Application for Permit to Drill  
Request for Permit Extension  
Validation**

(this form should accompany the Sundry Notice requesting permit extension)

**API:** 4304737797  
**Well Name:** Southam Canyon 10-25-13-32  
**Location:** 1801' FSL - 629' FWL, NWSW, Sec 32, T10S-R25E  
**Company Permit Issued to:** Enduring Resources, LLC  
**Date Original Permit Issued:** 3/27/2006

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 right-of-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

1/8/2008

Date

**Title:** Landman - Regulatory Specialist

**Representing:** Enduring Resources, LLC

**RECEIVED**  
**JAN 16 2008**  
 DIV. OF OIL, GAS & MINING



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

Al Arlian  
Enduring Resources LLC  
475 17<sup>TH</sup> Street, Ste. 1500  
Denver, CO 80202

Re: APD Rescinded – Southam Canyon 10-25-13-32, Sec. 32, T. 10S, R. 25E  
Uintah County, Utah API No. 43-047-37797

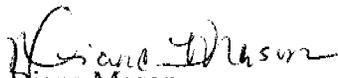
Dear Mr. Arlian:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on March 27, 2006. On January 17, 2007 and January 17, 2008, the Division granted a one-year APD extension. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective 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  
SITLA, Ed Bonner

