Enduring Resources

475 17TH Street Suite 1500 Denver Colorado 80202
Telephone 303 573-1222 Fax 303 573 0461

September 20, 2007

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 Mason

RE: Enduring Resources, LLC
Hanging Rock 11-23-21-36
NE-NW 36-11S-23E
State Lease: ML-50085
Uintah County, Utah

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

RECEIVED
SEP 2 5 2007
DIV. OF OIL, GAS & MINING

ara
Enclosures:

cc: SITLA w/ attachments

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

FORM 3

AMENDED REPORT ☐
(highlight changes)

APPLICATION FOR PERMIT TO DRILL

5. MINERAL LEASE NO: ML-50085
6. SURFACE: State

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

7. IF INDIAN, ALLOTTEE OR TRIBE NAME:

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

8. UNIT or CA AGREEMENT NAME:

2. NAME OF OPERATOR: Enduring Resources, LLC

9. WELL NAME and NUMBER: Hanging Rock 11-23-21-36

3. ADDRESS OF OPERATOR: 475 17th St., Ste 1500 CITY Denver STATE CO ZIP 80220
PHONE NUMBER: (303) 350-5114

10. FIELD AND POOL, OR WILDCAT: Undesignated

4. LOCATION OF WELL (FOOTAGES)
AT SURFACE: 554' FNL - 1785' FWL 646006X 44092564 39.822653 -109.294021
AT PROPOSED PRODUCING ZONE: Same

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NENW 36 11S 23E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: 42 miles South of Bonanza, UT

12. COUNTY: Uintah
13. STATE: UTAH

15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET): 554'
16. NUMBER OF ACRES IN LEASE: 640
17. NUMBER OF ACRES ASSIGNED TO THIS WELL: 40 acres

18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET): 1082'
19. PROPOSED DEPTH: 4,525
20. BOND DESCRIPTION: RLB0008031

21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): 5776' RT-KB
22. APPROXIMATE DATE WORK WILL START: 1/1/2008
23. ESTIMATED DURATION: 20 days

24. **PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT			SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT			
20"	14"	line pipe		40	3 yards	Ready Mix		
11"	8-5/8"	J-55	24#	2,000	Premium Lead	183 sxs	3.50	11.1
					Premium Tail	183 sxs	1.15	15.8
7-7/8"	4-1/2"	N-80	11.6#	4,525	Class G	42 sxs	3.30	11.0
					50/50 Poz Class G	428 sxs	1.56	14.3

25. **ATTACHMENTS**

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

☑ WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER
☑ EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER
☑ COMPLETE DRILLING PLAN
☐ FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER

NAME (PLEASE PRINT) Alvin R. (Al) Arlian
TITLE Landman - Regulatory Specialist
SIGNATURE
DATE 9/19/2007

(This space for State use only)

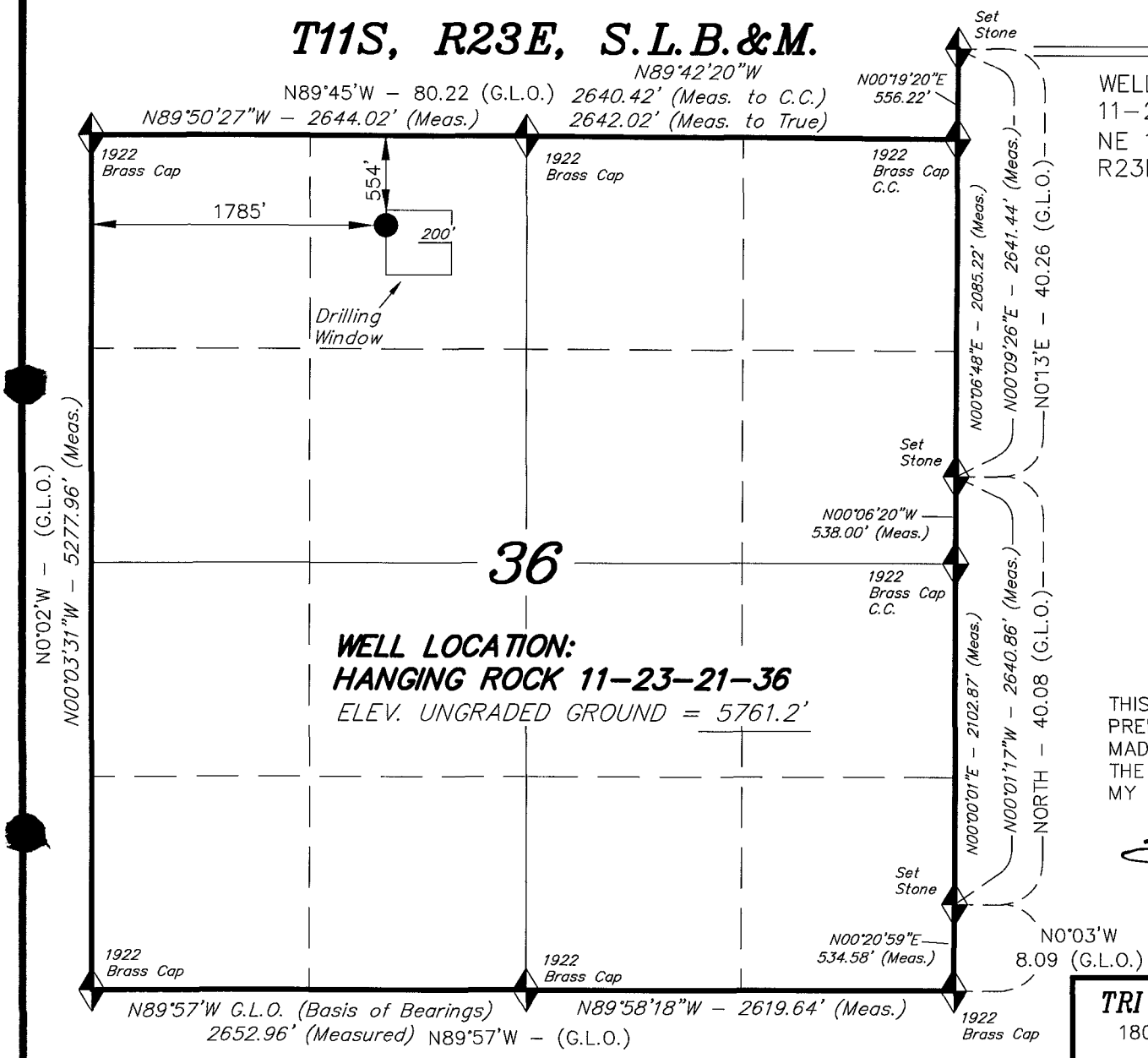
Approved by the
Utah Division of
Oil, Gas and Mining

RECEIVED
SEP 25 2007
DIV. OF OIL, GAS & MINING

API NUMBER ASSIGNED: 43-047-39657
APPROVAL
Date: 11-21-07
By:
(See Instructions on Reverse Side)

(11/2001)

T11S, R23E, S.L.B.&M.



ENDURING RESOURCES

WELL LOCATION, HANGING ROCK 11-23-21-36, LOCATED AS SHOWN IN THE NE 1/4 NW 1/4 OF SECTION 36, T11S, R23E, S.L.B.&M. UINTAH COUNTY, UTAH.

N

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

REGISTERED LAND SURVEYOR No.189377 STATE OF UTAH

STACY W. STEWART
REGISTERED LAND SURVEYOR
REGISTRATION No. 189377
STATE OF UTAH

◆ = SECTION CORNERS LOCATED

BASIS OF ELEV; U.S.G.S. 7-1/2 min QUAD (ARCHY BENCH SE)

HANGING ROCK 11-23-21-36 (Surface Location) NAD 83
LATITUDE = 39° 49' 21.54"
LONGITUDE = 109° 17' 41.03"

TRI STATE LAND SURVEYING & CONSULTING
180 NORTH VERNAL AVE. – VERNAL, UTAH 84078
(435) 781-2501

DATE SURVEYED: 08-21-07	SURVEYED BY: D.G.	SHEET
DATE DRAWN: 08-28-07	DRAWN BY: F.T.M.	2
REVISED:	SCALE: 1" = 1000'	OF 11

Enduring Resources, LLC
Hanging Rock 11-23-21-36
NENW 36-11S-23E
Uintah County, Utah
State Lease: ML-50085

ONSHORE ORDER 1 - DRILLING PLAN

1. Estimated Tops of Geological Markers:

Formation	Depth (K.B.)
Uinta	Surface
Green River	231
Wasatch	2581
Mesaverde	4076

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

Substance	Formation	Depth (K.B.)
	KB-Uinta Elevation: 5776'	
Oil / Gas	Green River	231
Oil /Gas	Wasatch	2581
Oil /Gas	Mesaverde	4076
	Estimated TD	4525

A 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 – 4525' (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 next16 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 drilling 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)
4525' (KB)	4-1/2", 11.6#/ft, N-80, LTC	6350/2.70 (d)	7780/3.60 (e)	223/4.65(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^3/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% CaC_2 + 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^3/sx) cement will be premium cement w/ 3% $CaCl_2$.+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^3/sx)
8-5/8"	Lead	500	Premium cement + 2% $CaCl_2$ + 0.25 pps celloflake	138	25	15.8	1.15
8-5/8"	Top job	As req.	Premium cement + 3% $CaCl_2$ + 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^3/sx)
4-1/2"	Lead	465	Class "G" + 5% NaCl + 12% Gel + 0.25 pps celloflake + 0.2% antifoam + 0.25% fluid loss + 1% extender	42	25	11.0	3.3
4-1/2"	Tail	2344	50/50 POZ Class G + 2% gel +1% $CaCl_2$ + 0.2% dispersant + 0.2% fluid loss + 0.1% antifoam	428	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'-4525' (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_2S 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 2,353 psi (calculated at 0.52psi/foot of hole) and maximum anticipated surface pressure equals approximately 1,358 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

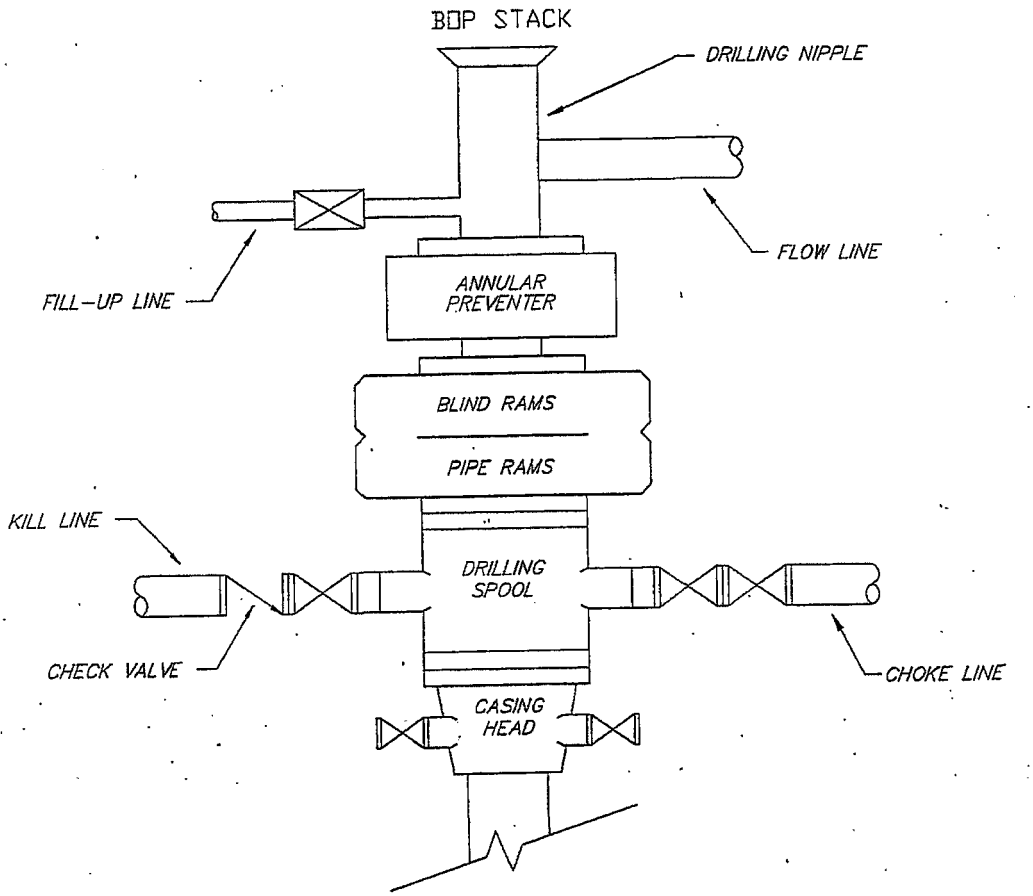
10. Other:

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.

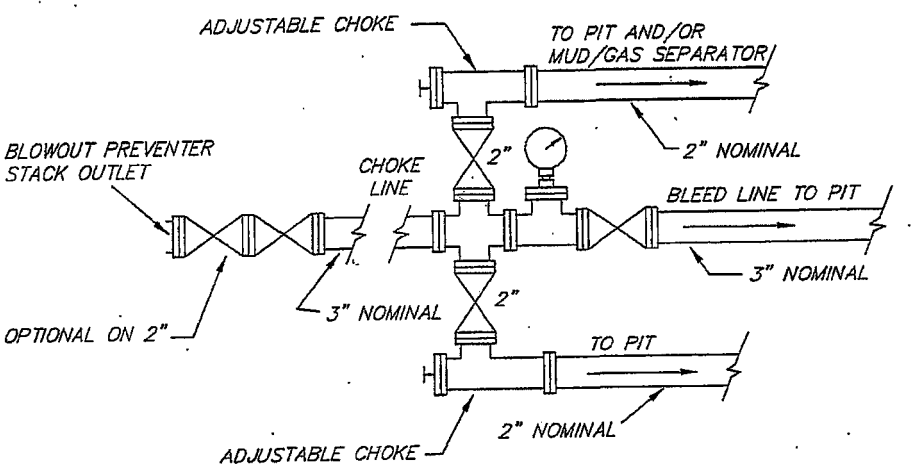
Single Shot directional surveys will be dropped every 2000 feet to monitor hole angle.

ENDURING RESOURCES, LLC

TYPICAL 3,000 p.s.i. BLOWOUT PREVENTER SCHEMATIC



TYPICAL 3,000 p.s.i. CHOKE MANIFOLD SCHEMATIC



Enduring Resources, LLC

Hanging Rock 11-23-21-36
NE-NW 36- 11S-23E
Uintah County, Utah
State Lease: ML-50085

MULTI-POINT SURFACE USE & OPERATIONS PLAN

1. Existing Roads:

Directions to the Hanging Rock 11-23-21-36 Well Pad

Beginning at the city of Vernal, Utah, head easterly on State Highway 40 for a distance of approximately ±4.0 miles to the junction of this road and state road UT-45. Turn right and proceed southerly along state road UT-45 approximately ±36.0 miles to the city of Bonanza. Leave the city of Bonanza heading south on state highway 45 for a distance of approximately 5.7 miles where the there is a turn-off to the right. Turn right, leaving state highway 45, and proceed southwest for a distance of approximately 5.1 miles (3.2 + 1.9 as shown on Topo "A"). The road then turns to the west; proceed northwesterly along said road for a distance of approximately 3.7 miles. Said road then turns to the southwest; proceed southwesterly then westerly for a distance of approximately 3.2 miles where the road forks. Turn left and bear southerly along the Asphalt Wash road for a distance of 3.0 miles where the road forks near a landing strip. Stay right, and continue south along the West Fork road for a distance of approximately 6.1 miles to the proposed access for the Hanging Rock 11-23-21-36 well pad. Turn left onto proposed access and continue west for approximately 1,420' to the proposed Hanging Rock 11-23-21-36 well pad.

2. Planned Access Roads:

The proposed access road will be approximately 1,420 feet of new construction all on-lease *(some of this access road may have already been constructed to access other SITLA wells on this same SITLA lease)*. All off-lease access is on an existing county road (Asphalt Wash Road #4160).

ALL NEW CONSTRUCTION IS ON SITLA LANDS.

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 provided 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 cutouts. 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:
		McElvain-Hanging Rock Fed I1-4, NWNW-1-12S-23E
f.	None:	Temporarily Abandoned Wells:
g.	None:	Disposal Wells:
h.	None:	Abandoned Wells:
i.	None:	Dry Holes:
j.	None:	Observation Wells:
k.	(9):	Pending (staked) Wells:
		i. Enduring has nine other wells staked in this section.
		ii. McElvain-Hanging Rock Fed 1-2, NWNE-1-12S-23E

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.

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 designated by DOG&M and SITLA. 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 for this well will be:

1,420'	Surface Pipeline	On-Lease	SITLA
-0-	Surface Pipeline	Off-Lease	n/a

If this well is capable of economic production, a 4" (or less) steel 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 1,420 feet of surface gas gathering pipeline shall be laid on the surface to minimize surface disturbance:

The proposed pipeline will begin at the well site; and be laid on the surface next to the new access road to tie-in to a steel surface pipeline that is located next to the county road.

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.

5. Location and Type of Water Supply:

Whenever practical, water will be obtained from Enduring Resources LLC Water Right Number 49-2215 or Water Right Number 49-2216 (*See Townships of permitted Use below). If those sources are not available, a new water source shall be submitted prior to commencing operations. (These permits have one-year terms and then must be renewed)

*Enduring Water Permits' 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 exits or surface runoff will destroy or damage the pit walls. The reserve pit will be constructed so that it will not leak, brake 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 well is 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 stockpiles(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.
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).

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/or 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:

The on-site will be scheduled by SITLA and DOG&M.

Special Conditions of Approval:

- Tanks and Production Equipment shall be painted Dark Olive Black.
- Surface Gathering Pipeline shall be 4" or less

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, Lessee's or Operator's Representatives:

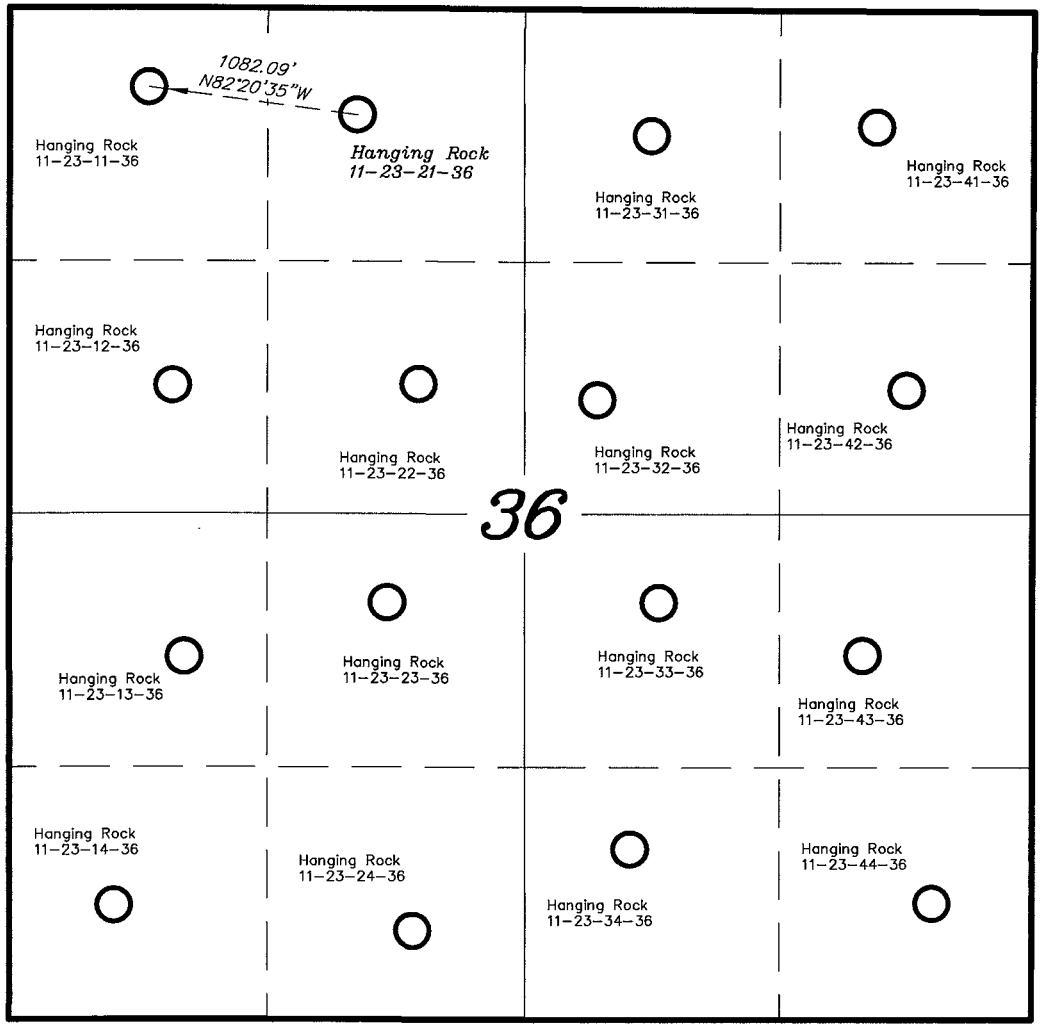
Representatives:

Alvin R. (Al) Arlian
Landman – Regulatory Specialist
Enduring Resources, LLC
475 17th Street, Suite 1500
Denver, Colorado 80202
Office Tel: 303-350-5114
Cell Tel: 303-880-3841
Fax Tel: 303-573-0461
aarlian@enduringresources.com

Doug Hammond
Utah Superintendent
Enduring Resources, LLC
759 East 500 South
Vernal, Utah 84078
Office Tel: 435-781-0172
Cell Tel: 435-790-6996
Fax Tel: 435-781-0174

dhammond@enduringresources.com

T11S, R23E, S.L.B.&M.



ENDURING RESOURCES

SECTION DRILLING MAP
HANGING ROCK 11-23-21-36

LEGEND

○ = Vertical Well

⊙ = Directional Well (Bottom Hole)

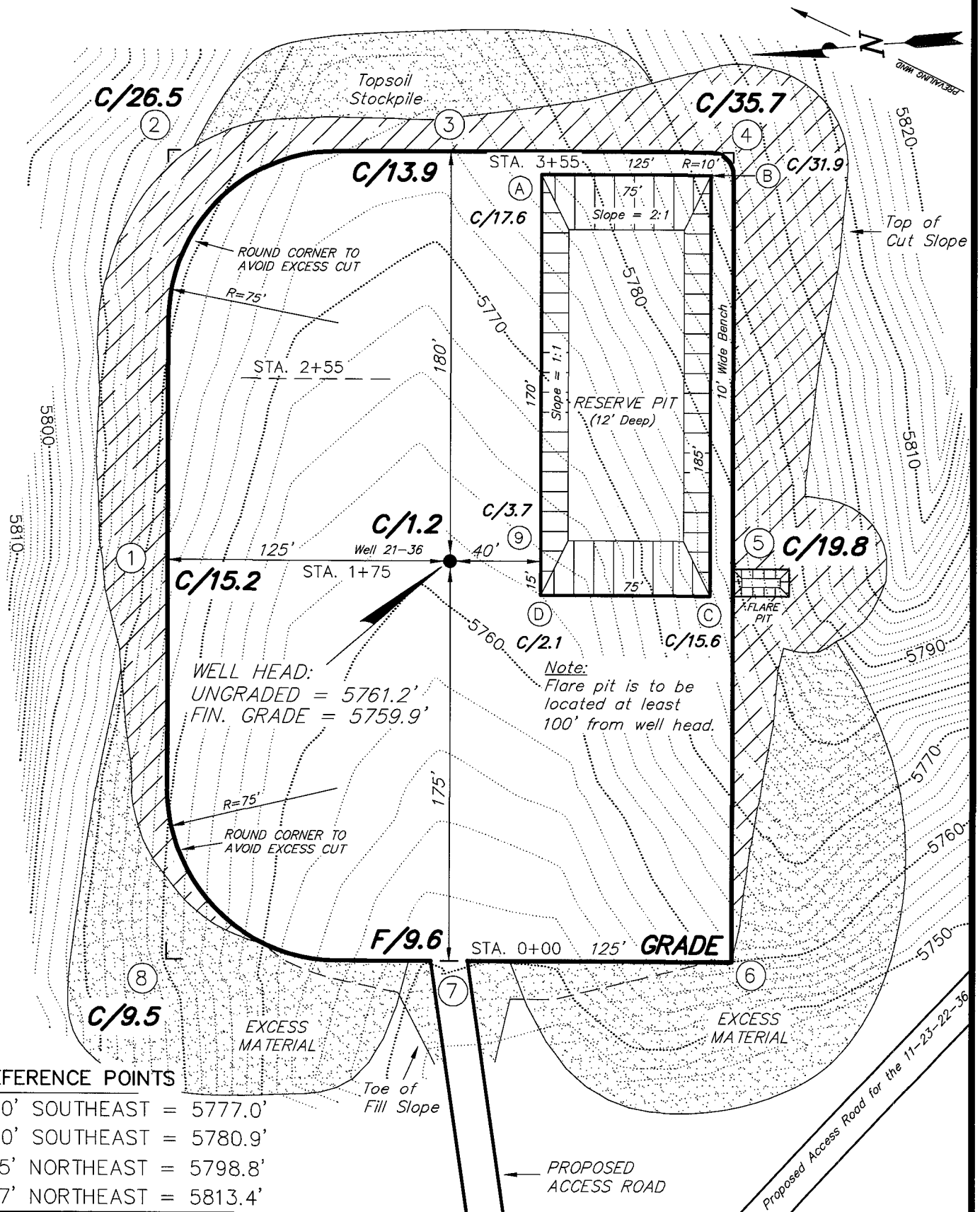
TRI STATE LAND SURVEYING & CONSULTING
180 NORTH VERNAL AVE. – VERNAL, UTAH 84078
(435) 781-2501

DATE SURVEYED: 08-21-07	SURVEYED BY: D.G.	SHEET
DATE DRAWN: 08-28-07	DRAWN BY: F.T.M.	1
REVISED:	SCALE: 1" = 1000'	OF 11

ENDURING RESOURCES

HANGING ROCK 11-23-21-36

Pad Location: NENW Section 36, T11S, R23E, S.L.B.&M.



REFERENCE POINTS

230' SOUTHEAST = 5777.0'
280' SOUTHEAST = 5780.9'
175' NORTHEAST = 5798.8'
197' NORTHEAST = 5813.4'

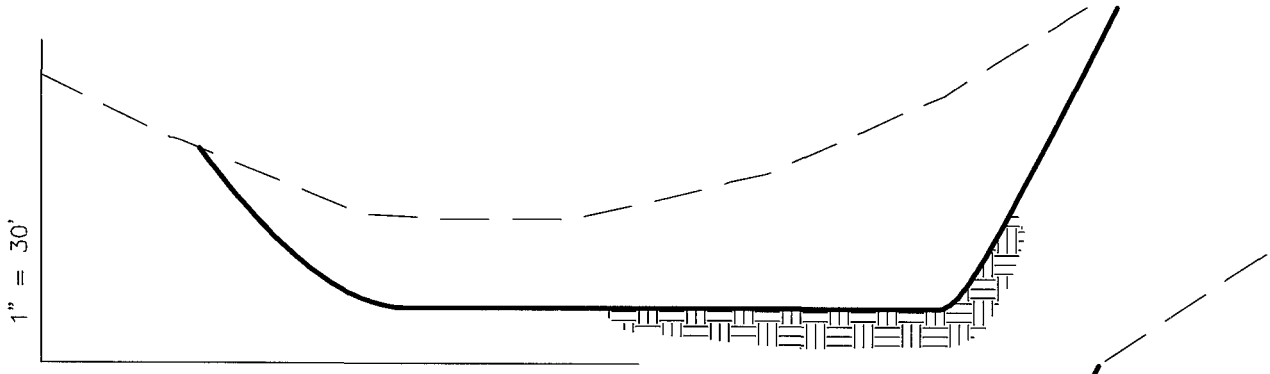
SURVEYED BY: D.G.	DATE SURVEYED: 08-21-07	Tri State Land Surveying, Inc. (435) 781-2501	SHEET 3 OF 11
DRAWN BY: F.T.M.	DATE DRAWN: 08-28-07	180 NORTH VERNAL AVE. VERNAL, UTAH 84078	
SCALE: 1" = 60'	REVISED:		

ENDURING RESOURCES

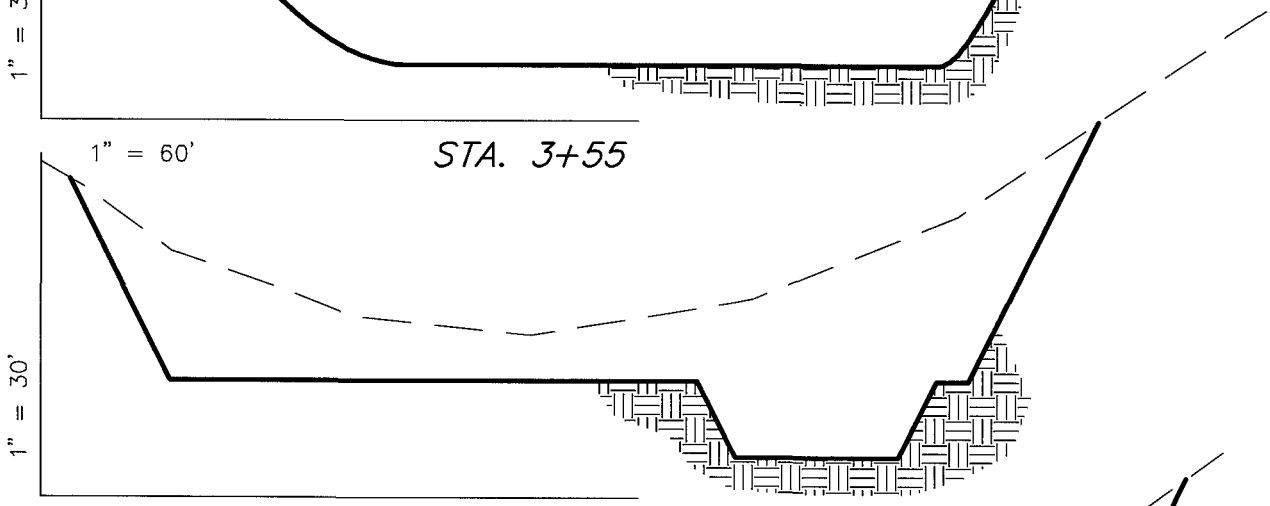
CROSS SECTIONS

HANGING ROCK 11-23-21-36

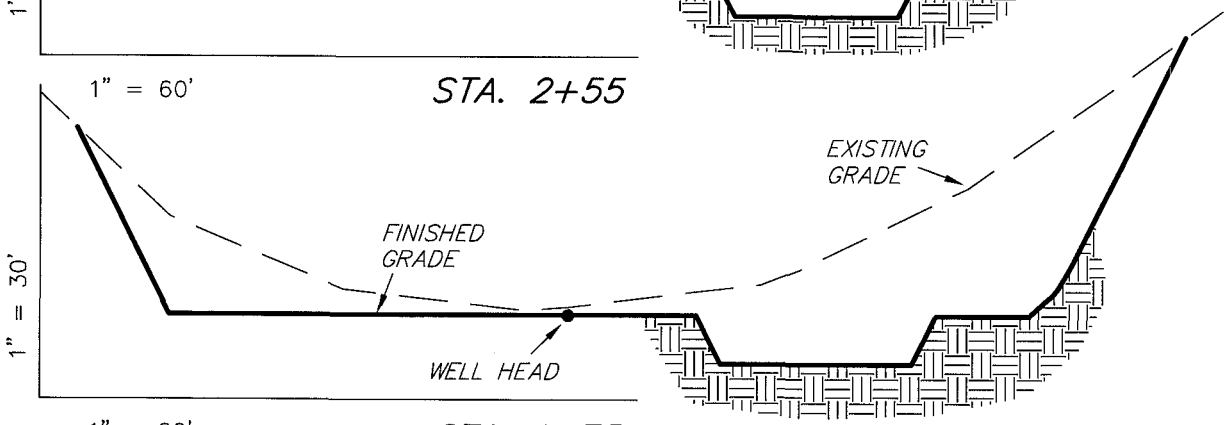
Pad Location: NENW Section 36, T11S, R23E, S.L.B.&M.



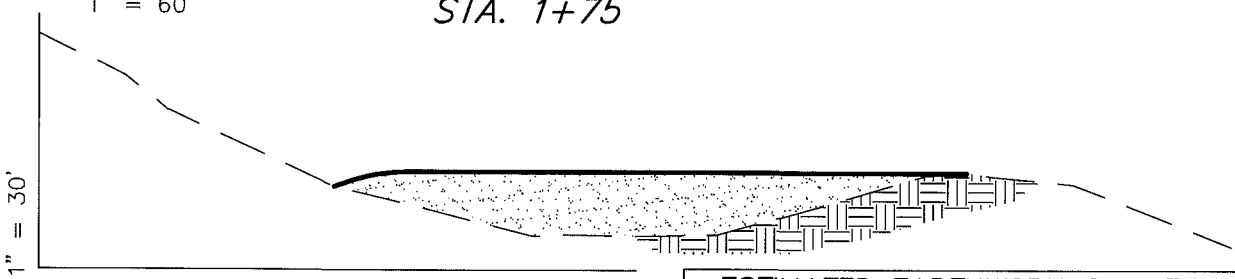
STA. 3+55



STA. 2+55



STA. 1+75



STA. 0+00

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

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

ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	34,110	3,430	Topsoil is not included in Pad Cut	30,680
PIT	4,550	0		4,550
TOTALS	38,660	3,430	2,130	35,230

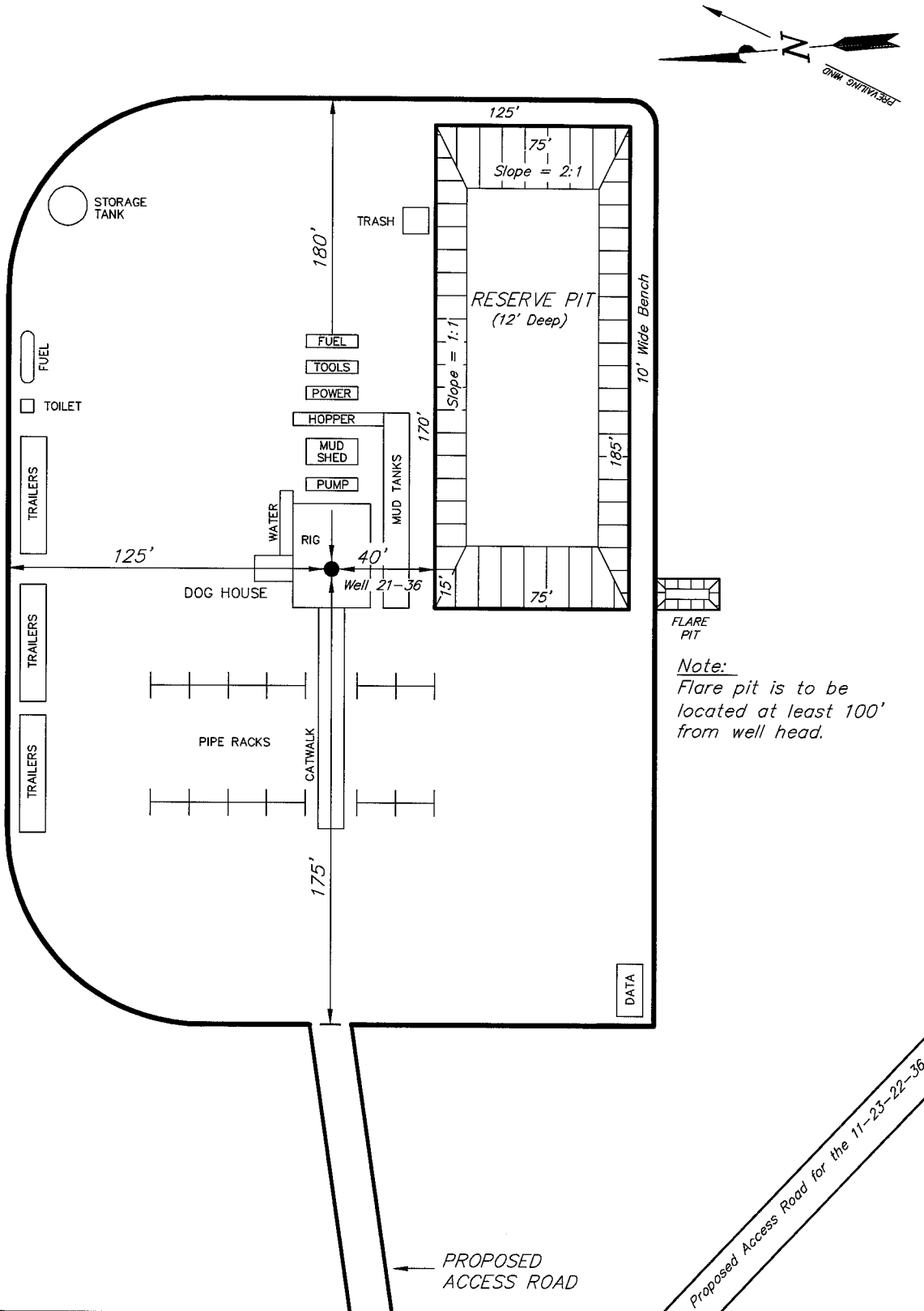
SURVEYED BY: D.G.	DATE SURVEYED: 08-21-07	Tri State Land Surveying, Inc. (435) 781-2501	SHEET 4 OF 11
DRAWN BY: F.T.M.	DATE DRAWN: 08-28-07	180 NORTH VERNAL AVE. VERNAL, UTAH 84078	
SCALE: 1" = 60'	REVISED:		

ENDURING RESOURCES

TYPICAL RIG LAYOUT

HANGING ROCK 11-23-21-36

Pad Location: NENW Section 36, T11S, R23E, S.L.B.&M.



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

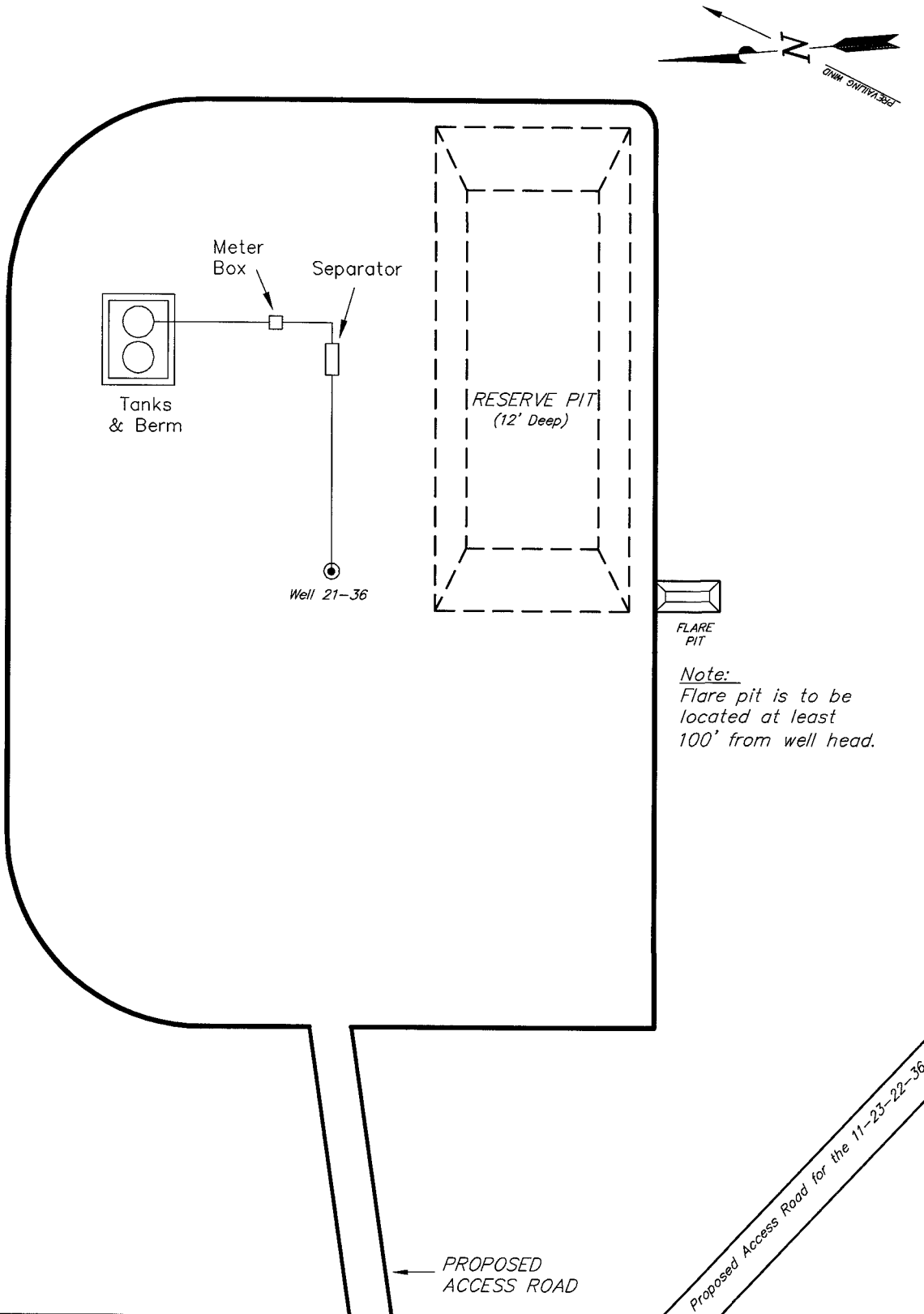
SURVEYED BY: D.G.	DATE SURVEYED: 08-21-07	Tri State Land Surveying, Inc. (435) 781-2501	SHEET 5 OF 11
DRAWN BY: F.T.M.	DATE DRAWN: 08-28-07	180 NORTH VERNAL AVE. VERNAL, UTAH 84078	
SCALE: 1" = 60'	REVISED:		

ENDURING RESOURCES

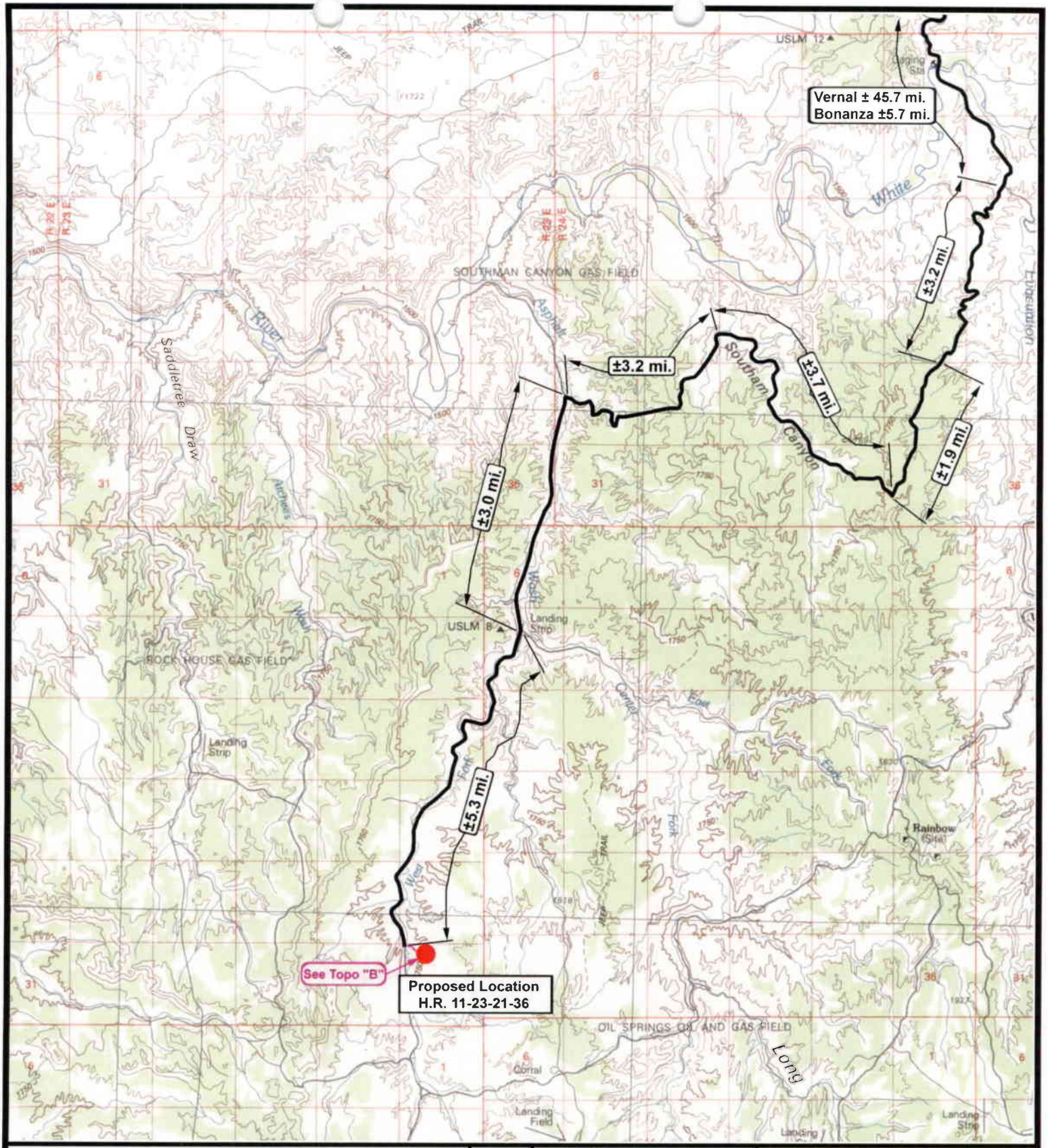
PRODUCTION SCHEMATIC

HANGING ROCK 11-23-21-36

Pad Location: NENW Section 36, T11S, R23E, S.L.B.&M.



SURVEYED BY: D.G.	DATE SURVEYED: 08-21-07	Tri State Land Surveying, Inc. (435) 781-2501 180 NORTH VERNAL AVE. VERNAL, UTAH 84078	SHEET 6 OF 11
DRAWN BY: F.T.M.	DATE DRAWN: 08-28-07		
SCALE: 1" = 60'	REVISED:		



ENDURING RESOURCES

Hanging Rock 11-23-21-36
Sec. 36, T11S, R23E, S.L.B.&M.

N

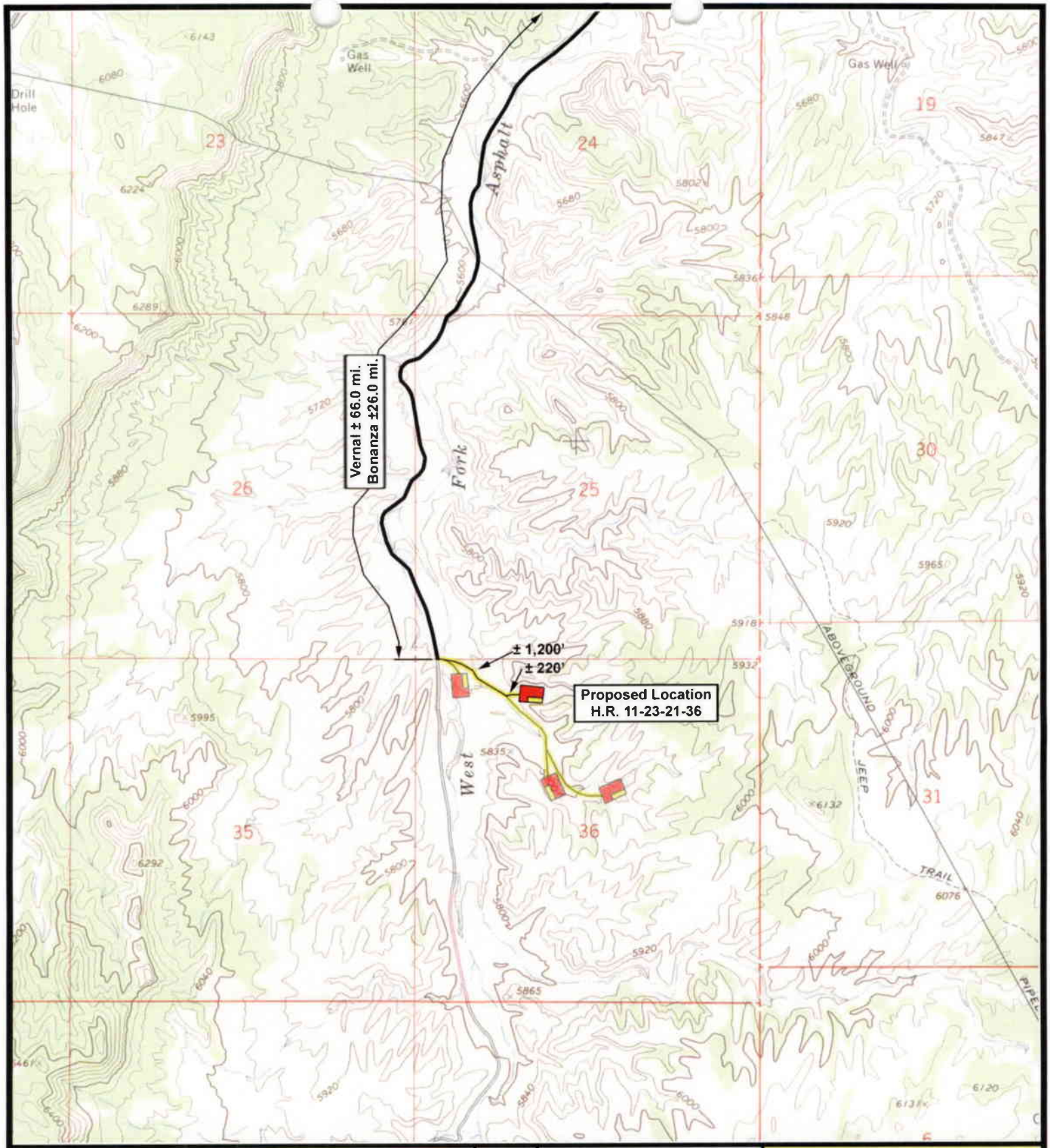
Tri-State Land Surveying Inc.
(435) 781-2501
180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1 : 100,000
DRAWN BY: mw
DATE: 09-10-2007

Legend
Existing Road
Proposed Access

TOPOGRAPHIC MAP "A"

SHEET 7 OF 10



ENDURING RESOURCES

Hanging Rock 11-23-21-36
Sec. 36, T11S, R23E, S.L.B.&M.

N

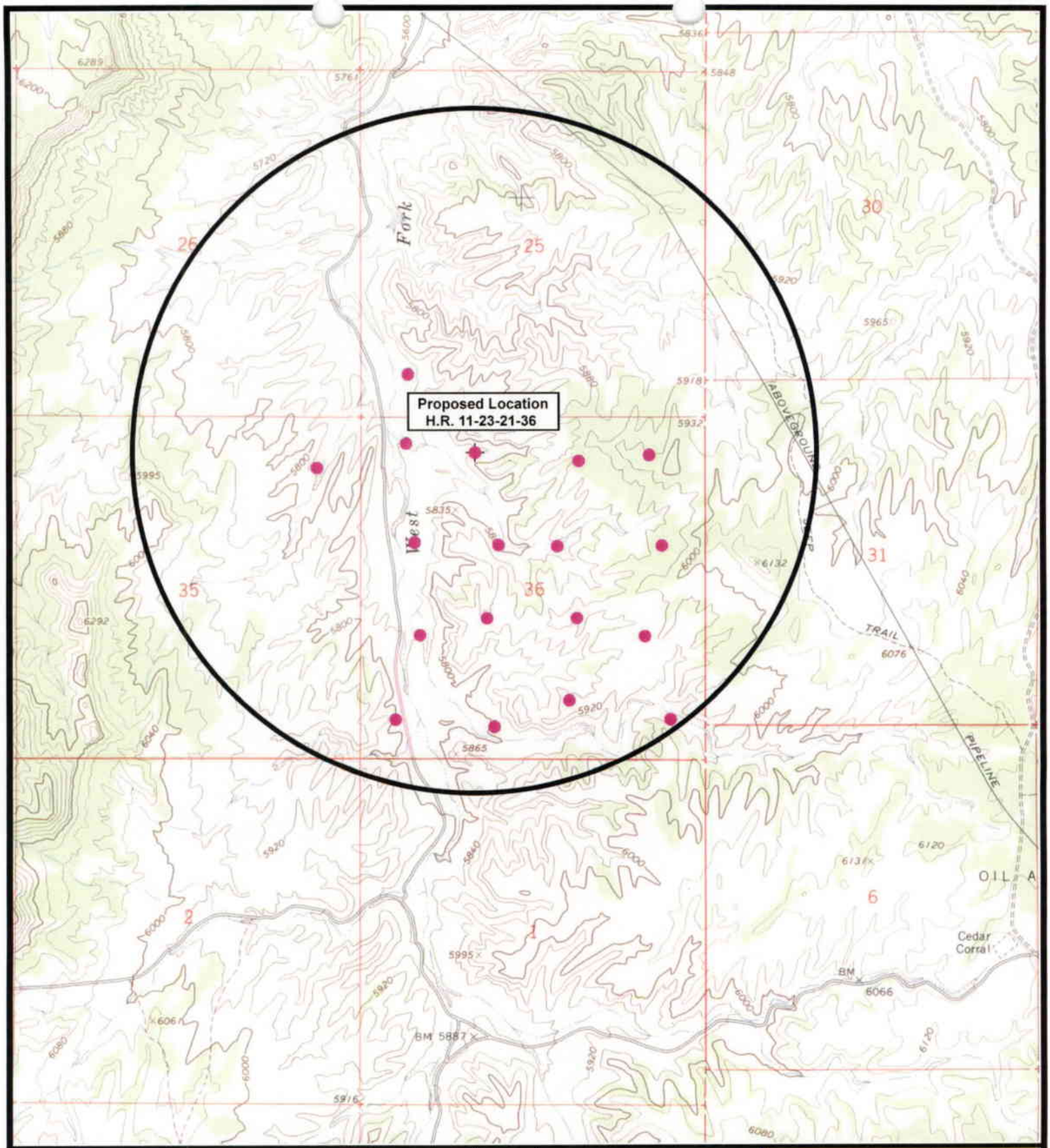
Tri-State Land Surveying Inc.
(435) 781-2501
180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1" = 2,000'
DRAWN BY: mw
DATE: 09-10-2007

Legend
Existing Road
Proposed Access

TOPOGRAPHIC MAP "B"

SHEET 8 OF 10



ENDURING RESOURCES

Hanging Rock 11-23-21-36
Sec. 36, T11S, R23E, S.L.B.&M.

N

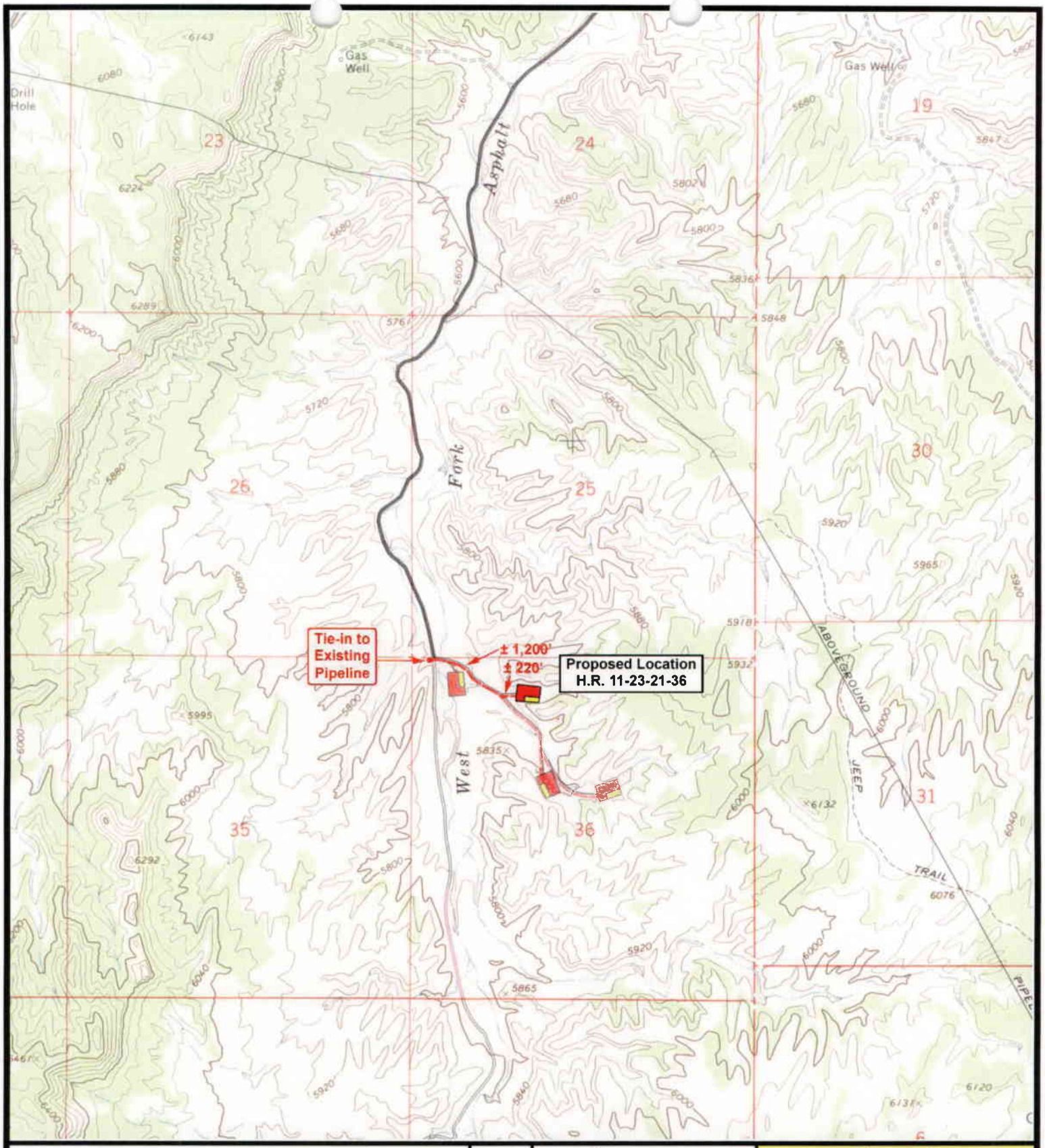
Tri-State Land Surveying Inc.
(435) 781-2501
180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1" = 2,000'
DRAWN BY: mw
DATE: 09-10-2007

Legend
Location
One-Mile Radius

TOPOGRAPHIC MAP "C"

SHEET 9 OF 10



ENDURING RESOURCES

Hanging Rock 11-23-21-36
Sec. 36, T11S, R23E, S.L.B.&M.

N

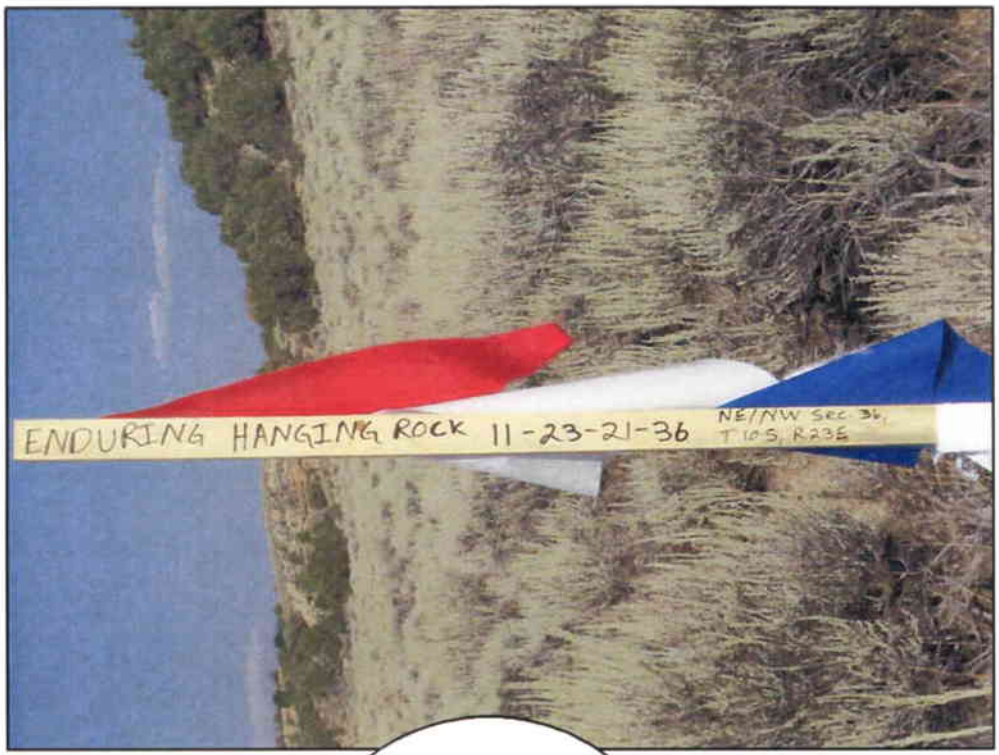
Tri-State Land Surveying Inc.
(435) 781-2501
180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1" = 2,000'
DRAWN BY: mw
DATE: 09-10-2007

Legend
Roads
Proposed Gas Line

TOPOGRAPHIC MAP "D"

SHEET 10 OF 10



CENTER STAKE

ENDURING RESOURCES

H.R. 11-23-21-36

Date Photographed: 08/21/2007
Date Drawn: 09/16/2007
Drawn By: mw

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

NORTH

ENDURING RESOURCES

H.R. 11-23-21-36

Date Photographed: 08/21/2007

Date Drawn: 09/16/2007

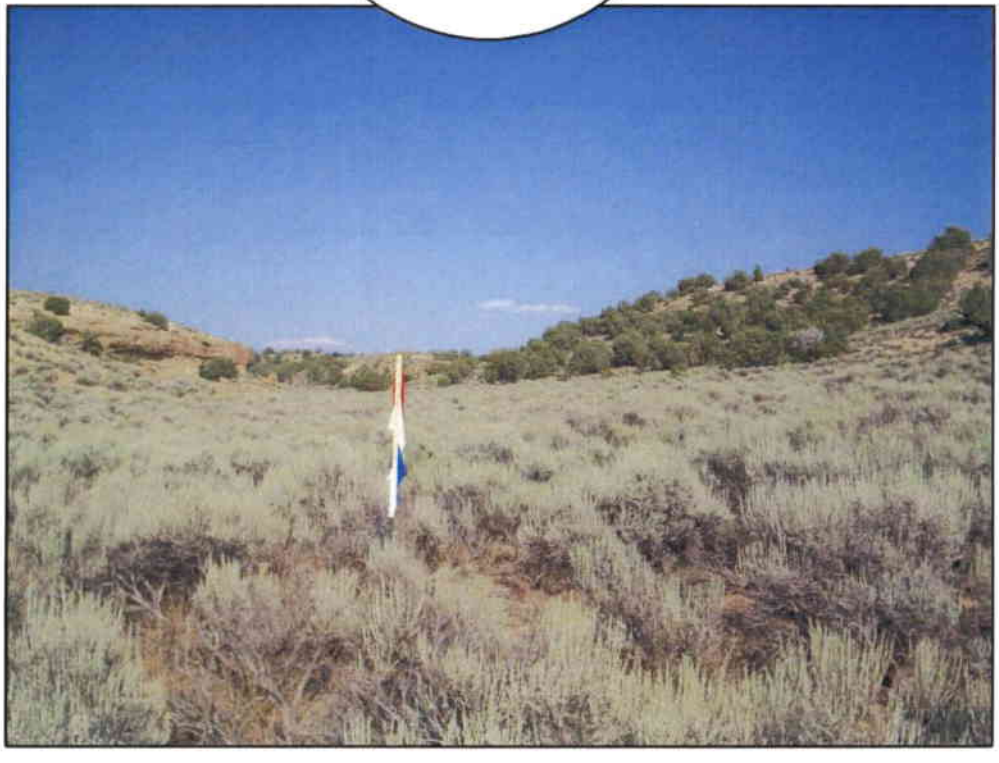
Drawn By: mw

Tri-State Land Surveying Inc.

(435) 781-2501

180 North Vernal Ave. Vernal, Utah 84078

EAST



SOUTH

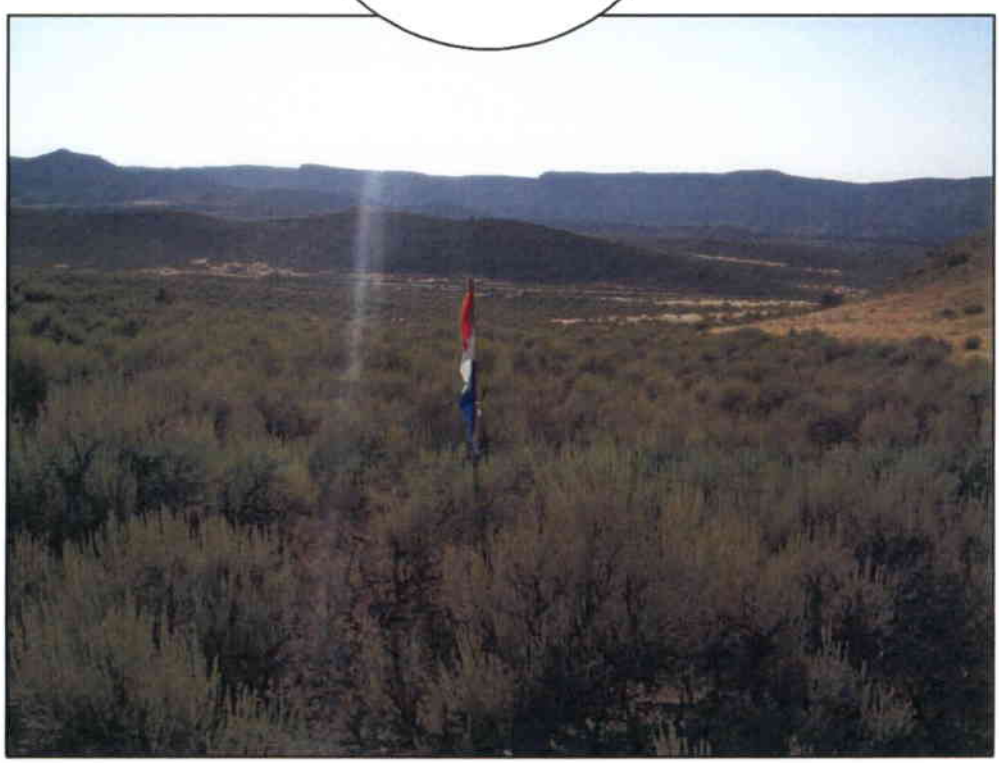
ENDURING RESOURCES

H.R. 11-23-21-36

Date Photographed: 08/21/2007
Date Drawn: 09/16/2007
Drawn By: mw

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

WEST



Directions to the Hanging Rock 11-23-21-36 Well Pad

Beginning at the city of Vernal, Utah, head easterly on State Highway 40 for a distance of approximately ±4.0 miles to the junction of this road and state road UT-45. Turn right and proceed southerly along state road UT-45 approximately ±36.0 miles to the city of Bonanaza. Leave the city of Bonanza heading south on state highway 45 for a distance of approximately 5.7 miles where the there is a turn-off to the right. Turn right, leaving state highway 45, and proceed southwest for a distance of approximately 5.1 miles (3.2 + 1.9 as shown on Topo "A"). The road then turns to the west; proceed northwesterly along said road for a distance of approximately 3.7 miles. Said road then turns to the southwest; proceed southwesterly then westerly for a distance of approximately 3.2 miles where the road forks. Turn left and bear southerly along the Asphalt Wash road for a distance of 3.0 miles where the road forks near a landing strip. Stay right, and continue south along the West Fork road for a distance of approximately 6.1 miles to the proposed access for the Hanging Rock 11-23-21-36 well pad. Turn left onto proposed access and continue west for approximately 1,420' to the proposed Hanging Rock 11-23-21-36 well pad.

WORKSHEET

APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 09/25/2007

API NO. ASSIGNED: 43-047-39657

WELL NAME: HANGING ROCK 11-23-21-36

OPERATOR: ENDURING RESOURCES, LLC (N2750)

PHONE NUMBER: 303-350-5114

CONTACT: AL ARLIAN

PROPOSED LOCATION:

NENW 36 110S 230E

SURFACE: 0554 FNL 1785 FWL

BOTTOM: 0554 FNL 1785 FWL

COUNTY: UINTAH

LATITUDE: 39.82265 LONGITUDE: -109.2940

UTM SURF EASTINGS: 646006 NORTHINGS: 4409256

FIELD NAME: UNDESIGNATED (2)

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
Engineering	11/21/07	DKD
Geology		
Surface		

LEASE TYPE: 3 - State

LEASE NUMBER: ML-50085

SURFACE OWNER: 3 - State

PROPOSED FORMATION: MVRD

COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

✓ Plat

✓ Bond: Fed[] Ind[] Sta[] Fee[]
(No. RLB0008031)

N Potash (Y/N)

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

✓ Water Permit
(No. 49-2216)

N RDCC Review (Y/N)
(Date:)

NA Fee Surf Agreement (Y/N)

NA Intent to Commingle (Y/N)

LOCATION AND SITING:

___ R649-2-3.

Unit: ___

✓ R649-3-2. General
Siting: 460 From Qtr/Qtr & 920' Between Wells

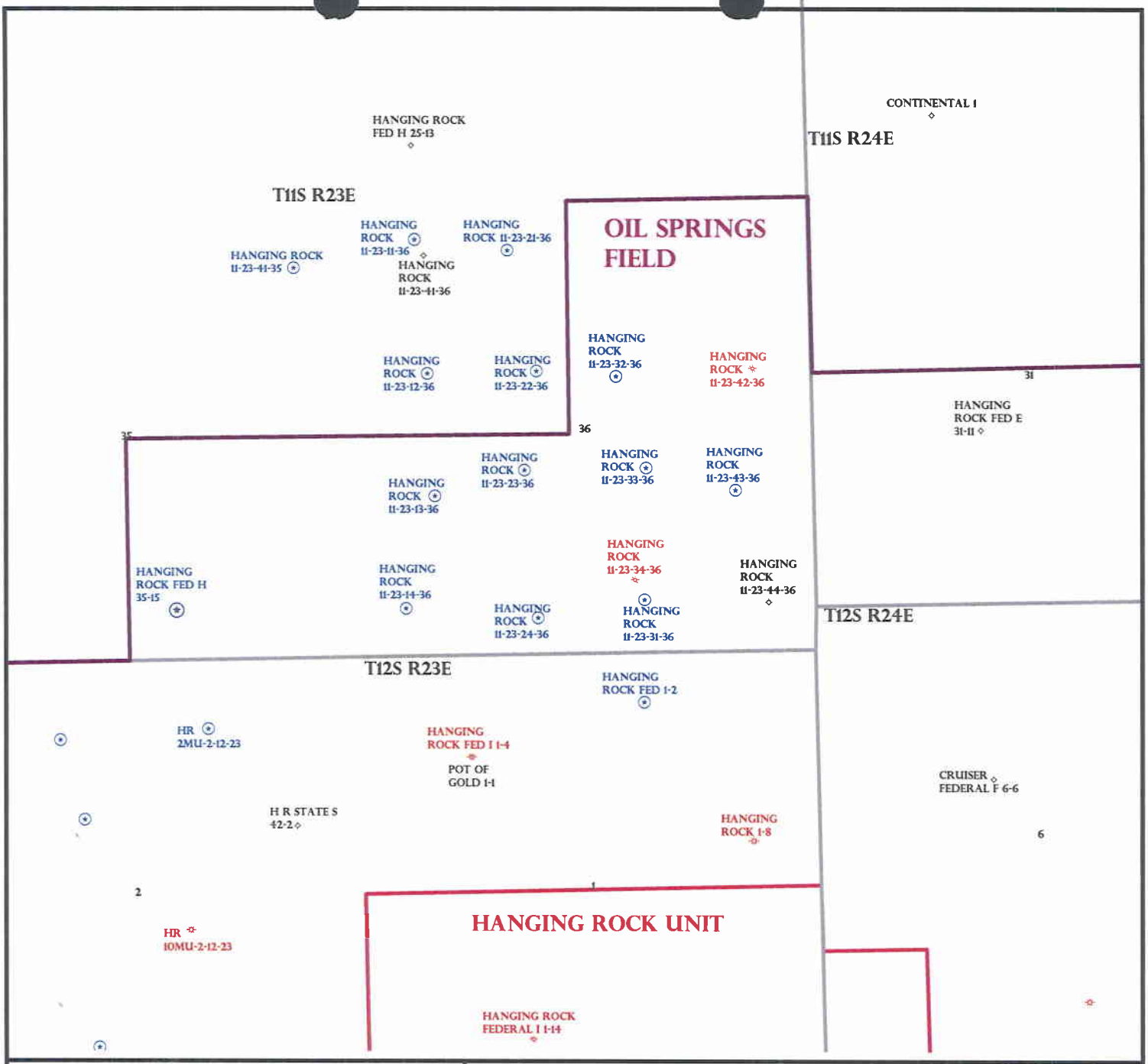
___ R649-3-3. Exception

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

___ R649-3-11. Directional Drill

COMMENTS: Needs Permit (10-24-07)

STIPULATIONS:
1- Spacing Stip
2- Statement of Basis
3- Surface Csg Cmt Stip



OPERATOR: ENDURING RES LLC (N2750)

SEC: 36 T.11S R. 23E

FIELD: UNDESIGNATED (002)

COUNTY: UINTAH

SPACING: R649-3-2 / GENERAL SITING

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

UTAH DNR
OIL, GAS & MINING

N
W E
S

PREPARED BY: DIANA MASON
DATE: 26-SEPTEMBER-2007

Application for Permit to Drill
Statement of Basis

APD No	API WellNo	Status	Well Type	Surf Ownr	CBM
566	43-047-39657-00-00		GW	S	No

Operator ENDURING RESOURCES, LLC **Surface Owner-APD**
Well Name HANGING ROCK 11-23-21-36 **Unit**
Field UNDESIGNATED **Type of Work**
Location NENW 36 11S 23E S 554 FNL 1785 FWL GPS Coord (UTM) 646006E 4409256N

Geologic Statement of Basis

Enduring proposes to set 2,000 feet of surface casing cemented to the surface. The base of the moderately saline water is estimated at 2,700 feet. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the center of Section 36. The surface formation at this location is the Uinta/Green River Formation transition. The Uinta Formation is made up of discontinuous sands interbedded with shales and are not expected to produce prolific aquifers. The Green River Formation is made up of interbedded limestones, shales and sandstones. Fresh water aquifers can be found in the Green River Formation and should be protected. The proposed surface casing should adequately protect any potentially useable aquifers. Production casing cement should be brought up above the base of the moderately saline ground water.

Brad Hill 10/29/2007
APD Evaluator **Date / Time**

Surface Statement of Basis

The location is in the West Fork of Asphalt Draw, approximately 27 road miles south west of Bonanza Ut, and approximately 65 miles southeast of Vernal, UT. Access from Vernal, UT is by Utah State Highways, Uintah County and existing oilfield development roads to where approximately 220 feet of additional road will be constructed.

Topography in the general area is broad canyon bottoms separated by frequently steep and often ledgey side-slopes, which top-out onto often broad ridge tops. Frequent outwash plains and deposits occur along the sides of the major bottoms. West Fork of Asphalt Wash is a broad somewhat gentle alluvial wash, which is dry except for spring runoff and sometimes-intense summer rainstorms. No seeps springs or streams are known to exist in the immediate area. An occasional pond constructed for livestock and wildlife watering occurs. The White River is approximately 10 miles down-drainage to the north.

The proposed Hanging Rock 11-23-21-36 gas well is in the bottom of a swale with rounded sides. The location will extend across the total bottom of the swale. Above the location the swale shows little evidence of flows. If summer flows occur they will flow across the location. To the north is a rocky side-hill with sandstone bedrock. The southwest corner of the location is planned to be rounded of to reduce the amount of cut into the side slope. The location was sized and laid out for drilling to the deeper Mesa Verde formation. The well will be drilled to the Wasatch formation and will not require as large of reserve pit as designed. The reserve pit side of the location will be reduced 25 feet and the length of the pit reduced to 125 feet.

Both the minerals and surface are owned by SITLA.

Jim Davis of SITLA and Ben Williams representing the UDWR attended the presite.

Mr. Williams stated the area is classified as high value winter habitat for both deer and elk. To reduce the disturbance to these species during this critical period, he recommended to Mr. Hammond and Mr. Davis a restriction period from November 15 to April 15th where no construction or drilling including work-over rigs occur. Mr. Williams also gave Mr. Hammond and Mr. Davis a copy of this evaluation and also a seed mix

recommendation to be used when the reserve pit and location are reclaimed.

Floyd Bartlett	10/24/2007
Onsite Evaluator	**Date / Time**

Conditions of Approval / Application for Permit to Drill

Category	Condition
Pits	A synthetic liner with a minimum thickness of 16 mils with a felt subliner shall be properly installed and maintained in the reserve pit.
Surface	Drainages adjacent to the proposed pad shall be diverted around the location.

ON-SITE PREDRILL EVALUATION

Utah Division of Oil, Gas and Mining

Operator ENDURING RESOURCES, LLC
Well Name HANGING ROCK 11-23-21-36
API Number 43-047-39657-0 **APD No** 566 **Field/Unit** UNDESIGNATED
Location: 1/4,1/4 NENW **Sec** 36 **Tw** 11S **Rng** 23E 554 FNL 1785 FWL
GPS Coord (UTM) 646005 4409258 **Surface Owner**

Participants

Floyd Bartlett (DOGM), Douglas Hammond (Enduring Resources), Mike Stewart (Ponderosa Oilfield Services), Jim Davis (SITLA), Ben Williams (UDWR), Dustin Gardner and Ryan Reese (TRI-State Land Surveying and Consulting)

Regional/Local Setting & Topography

The location is in the West Fork of Asphalt Draw, approximately 27 road miles south west of Bonanza Ut, and approximately 65 miles southeast of Vernal, UT. Access from Vernal, UT is by Utah State Highways, Uintah County and existing oilfield development roads to where approximately 220 feet of additional road will be constructed.

Topography in the general area is broad canyon bottoms separated by frequently steep and often ledgey side-slopes, which top-out onto often broad ridge tops. Frequent outwash plains and deposits occur along the sides of the major bottoms. West Fork of Asphalt Wash is a broad somewhat gentle alluvial wash, which is dry except for spring runoff and sometimes-intense summer rainstorms. No seeps springs or streams are known to exist in the immediate area. An occasional pond constructed for livestock and wildlife watering occurs. The White River is approximately 10 miles down-drainage to the north.

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Both the minerals and surface are owned by SITLA.

Surface Use Plan

Current Surface Use
Grazing
Recreational
Wildlfe Habitat
Deer Winter Range

New Road Miles	Well Pad		Src Const Material	Surface Formation
0.05	**Width** 199	**Length** 290	Onsite	UNTA

Ancillary Facilities N

Waste Management Plan Adequate? Y

Environmental Parameters

Affected Floodplains and/or Wetland N

Flora / Fauna

Vegetation consists primarily of heavy big sagebrush, cheatgrass Russian thistle and some annuals..

Deer , elk , coyotes, rabbits, sheep and cattle during the winter, small mammals and birds.

Soil Type and Characteristics

Moderately deep gravely sandy loam

Erosion Issues N

Sedimentation Issues Y

Some seasonal flow may run across location.

Site Stability Issues N

Drainage Diverson Required N

Berm Required? N

Erosion Sedimentation Control Required? N

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

Reserve Pit

Site-Specific Factors		Site Ranking
Distance to Groundwater (feet)	>200	0
Distance to Surface Water (feet)	>1000	0
Dist. Nearest Municipal Well (ft)	>5280	0
Distance to Other Wells (feet)	300 to 1320	10
Native Soil Type	Mod permeability	10
Fluid Type	Fresh Water	5
Drill Cuttings	Normal Rock	0
Annual Precipitation (inches)	10 to 20	5
Affected Populations	<10	0
Presence Nearby Utility Conduits	Not Present	0
	Final Score	30 1 **Sensitivity Level**

Characteristics / Requirements

The size of the pit will be reduced from what is shown on Sheet 3 of the APD. It is planned to be 50' by 125' and 12' deep in an area of cut on the southeast corner of the location. No stabilization problems are expected.
A 16 mil liner will be required.

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

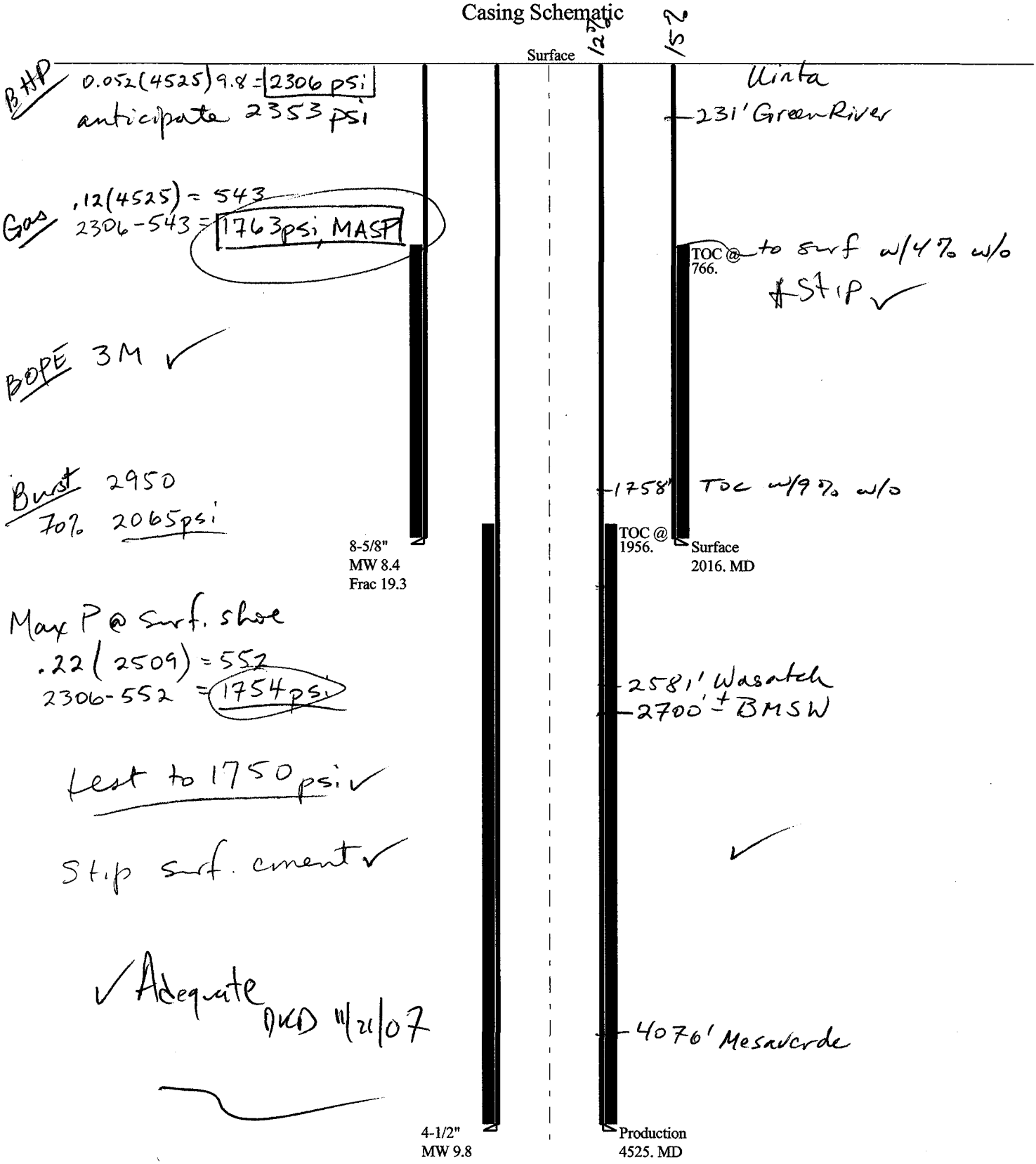
Other Observations / Comments

ATV's were used to access the site.

Floyd Bartlett 10/24/2007
Evaluator **Date / Time**

2007-11 Enduring Hanging Rock 11-23-21-36

Casing Schematic



Well name:	**2007-11 Enduring Hanging Rock 11-23-21-36**
Operator:	**Enduring Resource, LLC**
String type:	Surface
Project ID:	43-047-39657
Location:	Uintah County

Design parameters:

Collapse

Mud weight: 8.400 ppg

Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 1,761 psi

Internal gradient: 0.120 psi/ft

Calculated BHP 2,003 psi

No backup mud specified.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Tension:

8 Round STC: 1.80 (J)

8 Round LTC: 1.80 (J)

Buttress: 1.60 (J)

Premium: 1.50 (J)

Body yield: 1.50 (B)

Tension is based on buoyed weight.

Neutral point: 1,762 ft

Environment:

H2S considered? No

Surface temperature: 75 °F

Bottom hole temperature: 103 °F

Temperature gradient: 1.40 °F/100ft

Minimum section length: 266 ft

Cement top: 766 ft

Non-directional string.

Re subsequent strings:

Next setting depth: 4,525 ft

Next mud weight: 9.800 ppg

Next setting BHP: 2,304 psi

Fracture mud wt: 19.250 ppg

Fracture depth: 2,016 ft

Injection pressure: 2,016 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft^3)
1	2016	8.625	24.00	J-55	ST&C	2016	2016	7.972	720.9

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	880	1370	1.557	2003	2950	1.47	42	244	5.77 J

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Minerals
Phone: 801-538-5357
FAX: 801-359-3940

Date: November 15,2007
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 2016 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:	**2007-11 Enduring Hanging Rock 11-23-21-36**
Operator:	**Enduring Resource, LLC**
String type:	Production
Project ID:	43-047-39657
Location:	Uintah County

Design parameters:

Collapse

Mud weight: 9.800 ppg

Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 1,308 psi

Internal gradient: 0.220 psi/ft

Calculated BHP 2,304 psi

No backup mud specified.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Tension:

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

Tension is based on buoyed weight.

Neutral point: 3,862 ft

Environment:

H2S considered?	No
Surface temperature:	75 °F
Bottom hole temperature:	138 °F
Temperature gradient:	1.40 °F/100ft
Minimum section length:	1,500 ft
Cement top:	1,956 ft

Non-directional string.

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft^3)
1	4525	4.5	11.60	N-80	LT&C	4525	4525	3.875	394.9

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	2304	6350	2.757	2304	7780	3.38	45	223	4.98 J

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Minerals
Phone: 801-538-5357
FAX: 801-359-3940

Date: November 15,2007
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 4525 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.

From: Ed Bonner
To: Mason, Diana
Date: 10/18/2007 3:01 PM
Subject: Well Clearance

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

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

Enduring Resources, LLC
- Hanging Rock 11-23-23-36 (API 43 047 39648)
- Hanging Rock 11-23-32-36 (API 43 047 39649)
- Hanging Rock 11-23-33-36 (API 43 047 39650)
- Hanging Rock 11-23-22-36 (API 43 047 39651)
- Hanging Rock 11-23-31-36 (API 43 047 39656)
- Hanging Rock 11-23-21-36 (API 43 047 39657)

Kerr McGee Oil & Gas Onshore LP
- NBU 1022-14A (API 43 047 39524)
- NBU 1021-20H (API 43 047 39525)
- NBU 1021-20G (API 43 047 39526)
- NBU 1021-20F (API 43 047 39527)
- NBU 1021-20E (API 43 047 39528)
- NBU 1021-20D (API 43 047 39529)
- NBU 1021-20B (API 43 047 39530)
- NBU 1021-20O (API 43 047 39531)
- NBU 1021-20L (API 43 047 39532)
- NBU 1021-20K (API 43 047 39533)
- NBU 1021-20J (API 43 047 39534)

Medallion Exploration
- Atchee Ridge 2-20 (API 43 047 39517)
- Atchee Ridge 11-20 (API 43 047 39518)
- Atchee Ridge 6-20 (API 43 047 39519)
- Atchee Ridge 7-20 (API 43 047 39520)
- Atchee Ridge 3-20 (API 43 047 39521)

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

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 21, 2007

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

Re: Hanging Rock 11-23-21-36 Well, 554' FNL, 1785' FWL, NE NW, Sec. 36, T. 11 South, R. 23 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 43-047-39657.

Sincerely,

Gil Hunt
Associate Director

pab
Enclosures

cc: Uintah County Assessor
SITLA

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

UTAH DNR OIL, GAS & MINING

Operator: Enduring Resources, LLC

Well Name & Number Hanging Rock 11-23-21-36

API Number: 43-047-39657

Lease: ML-50085

Location: NE NW **Sec.** 36 **T.** 11 South **R.** 23 East

Conditions of Approval

1. **General**

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

2. **Notification Requirements**

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

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

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

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

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

   - Dan Jarvis at: (801) 538-5338 office (801) 942-0873 home
   - Carol Daniels at: (801) 538-5284 office
   - Dustin Doucet at: (801) 538-5281 office (801) 733-0983 home

3. **Reporting Requirements**

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

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

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

6. 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.

7. Surface casing shall be cemented to the surface.

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

CONFIDENTIAL

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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

5. LEASE DESIGNATION AND SERIAL NUMBER: ML-50085

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

7. UNIT or CA AGREEMENT NAME: n/a

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

8. WELL NAME and NUMBER: Hanging Rock 11-23-21-36

2. NAME OF OPERATOR: Enduring Resources, LLC

9. API NUMBER: 4304739657

3. ADDRESS OF OPERATOR: 475 17th Street, Suite 1500 CITY Denver STATE CO ZIP 80202

PHONE NUMBER: (303) 350-5719

10. FIELD AND POOL, OR WILDCAT: Undesignated

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 554' FNL - 1785' FWL

COUNTY: Uintah

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NENW 36 11S 23E S

STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
☑ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start:	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☐ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☑ OTHER: Request for APD Extension
	☐ CONVERT WELL TYPE	☐ 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: 11/21/2008
TO: 11/21/2009

Approved by the
Utah Division of
Oil, Gas and Mining

Date: 11-25-08

By:

NAME (PLEASE PRINT) Alvin R. (Al) Arlian

TITLE Landman - Regulatory Specialist

SIGNATURE

DATE 11/10/2008

(This space for State use only)

COPY SENT TO OPERATOR

Date: 11.26.2008

Initials: KS

RECEIVED
NOV 24 2008
DIV. OF OIL, GAS & MINING

(5/2000)

(See Instructions on Reverse Side)

ESET

Application for Permit to Drill
Request for Permit Extension
Validation

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

API: 4304739657
Well Name: Hanging Rock 11-23-21-36
Location: 554' FNL - 1785' FWL, NENW, Sec 36, T11S-R23E
Company Permit Issued to: Enduring Resources, LLC
Date Original Permit Issued: 11/21/2007

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

11/10/2008
Date

Title: Administrative Assistant

Representing: Enduring Resources, LLC

RECEIVED
NOV 24 2008
DIV. OF OIL, GAS & MINING

API Well No: 43047396570000

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: ML-50085

SUNDRY NOTICES AND REPORTS ON WELLS

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

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL: Gas Well

8. WELL NAME and NUMBER: HANGING ROCK 11-23-21-36

2. NAME OF OPERATOR: Enduring Resources, LLC

9. API NUMBER: 43047396570000

3. ADDRESS OF OPERATOR: 475 17th Street, Suite 1500 , Denver, CO, 80202

PHONE NUMBER: 303 350-5114 Ext

9. FIELD and POOL or WILDCAT: OIL SPRINGS

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
0554 FNL 1785 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: NENW Section: 36 Township: 11.0S Range: 23.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 11/25/2009	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ SPUD REPORT Date of Spud:	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	✓ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

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

Requesting an one-year extension to APD expiration date.

Approved by the Utah Division of Oil, Gas and Mining

Date: November 24, 2009

By:

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Alvin Arlian	303 350-5114	Landman-Regulatory
SIGNATURE: N/A		DATE: 11/24/2009

RECEIVED November 24, 2009

The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047396570000

API: 43047396570000
Well Name: HANGING ROCK 11-23-21-36
Location: 0554 FNL 1785 FWL QTR NENW SEC 36 TWNP 110S RNG 230E MER S
Company Permit Issued to: ENDURING RESOURCES, LLC
Date Original Permit Issued: 11/21/2007

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

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

Approved by the Utah Division of Oil, Gas and Mining

Signature: Alvin Arlian **Date:** 11/24/2009
Title: Landman-Regulatory **Representing:** ENDURING RESOURCES, LLC

Date: November 24, 2009
By:

RECEIVED November 24, 2009

GARY R. HERBERT
Governor

GREG BELL
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

November 18, 2010

Al Arlian
Enduring Resources, LLC
475-17th Street, Ste. 1500
Denver, CO 80202

Re: APD Rescinded – Hanging Rock 11-23-21-36, Sec.36 T.11S, R.23E
Uintah County, Utah API No. 43-047-39657

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 November 21, 2007. On November 25, 2008 and November 24, 2009 the Division granted a one-year APD extension. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective November 18, 2010.

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
Ed Bonner, SITLA