

UTAH OIL AND GAS CONSERVATION COMMISSION

REMARKS: WELL LOG ELECTRIC LOGS WATER SANDS LOCATION INSPECTED SUB REPORT/abd.
 9/6/202 LOCATION abandoned

DATE FILED SEPTEMBER 26, 1994

LAND FEE & PATENTED STATE LEASE NO. PUBLIC LEASE NO. UTU-37355 INDIAN

DRILLING APPROVED: OCTOBER 14, 1994

SPUDDED IN:

COMPLETED: 12/2/96 LA PUT TO PRODUCING:

INITIAL PRODUCTION:

GRAVITY A.P.I.

GOR:

PRODUCING ZONES:

TOTAL DEPTH:

WELL ELEVATION:

DATE ABANDONED: 12/02/96 LA'D

FIELD: NATURAL BUTTES

UNIT: NA

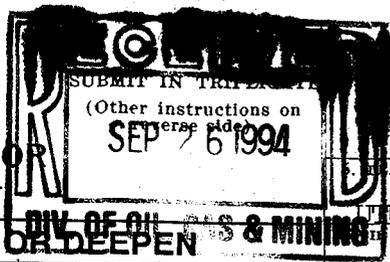
COUNTY: UINTAH

WELL NO. SOUTHMAN CANYON 8-3-D API NO. 43-047-32552

LOCATION 400' FNL FT. FROM (N) (S) LINE. 990' FWI FT. FROM (E) (W) LINE. NW NW 1/4 - 1/4 SEC. 8

TWP.	RGE.	SEC.	OPERATOR	TWP.	RGE.	SEC.	OPERATOR
				10S	23E	8	SNYDER OIL CORPORATION

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT



FORM APPROVED
OMB NO. 1004-0136
Expires: February 28, 1995

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK
 DRILL DEEPEN

b. TYPE OF WELL
 OIL WELL GAS WELL OTHER SINGLE ZONE MULTIPLE ZONE

2. NAME OF OPERATOR
 Snyder Oil Corporation Phone: (303) 592-8500

3. ADDRESS AND TELEPHONE NO.
 1625 Broadway, Suite 2200; Denver, Colorado 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
 At surface: 400' FNL, 990' FWL (NE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$) Section 8, T10S, R23E
 At proposed prod. zone: Same as above.

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 Approximately twelve (12) miles southwest of Bonanza, Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any) 400'

16. NO. OF ACRES IN LEASE 1920.00

17. NO. OF ACRES ASSIGNED TO THIS WELL 80

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 2900' \pm

19. PROPOSED DEPTH 8540'

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.) 5301' GR

22. APPROX. DATE WORK WILL START* October 15, 1994

LEASE DESIGNATION AND SERIAL NO. UTU-37355

INDIAN, ALLOTTEE OR TRIBE NAME Not Applicable

7. UNIT AGREEMENT NAME Not Applicable

8. FARM OR LEASE NAME, WELL NO. Southman Canyon 8-3-D

9. API WELL NO.

10. FIELD AND POOL, OR WILDCAT Southman Canyon

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Section 8, T10S, R23E

12. COUNTY OR PARISH Uintah

13. STATE Utah

PROPOSED CASING AND CEMENTING PROGRAM (All New)

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8" J-55	24.0#	0- 400'	300 sx circulated to surface *
7-7/8"	4-1/2" M-75	11.6#	0-8540'	1610 sx cement

* Cement volumes may change due to hole size. Calculate from Caliper Log.

EIGHT-POINT RESOURCE PROTECTION PLAN ATTACHED.

I hereby certify that Snyder Oil Corporation is authorized by the proper Lease Interest Owners to conduct lease operations associated with this Application for Permit to Drill the Southman Canyon Federal #8-3-D, Federal Lease #UTU-37355. Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Snyder Oil Corporation, Nationwide Bond #WY-2272, who will be responsible for compliance with all the terms and conditions of that portion of the lease associated with this Application.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED Tim A. Burns TITLE Drilling Engineer DATE August 11, 1994

(This space for Federal or State office use)
 PERMIT NO. 43-047-32552 APPROVAL DATE _____
 APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:
 DATE: 10/14/94
 BY: [Signature]
 WELL SPACING: less 179-6

APPROVED BY _____ TITLE _____

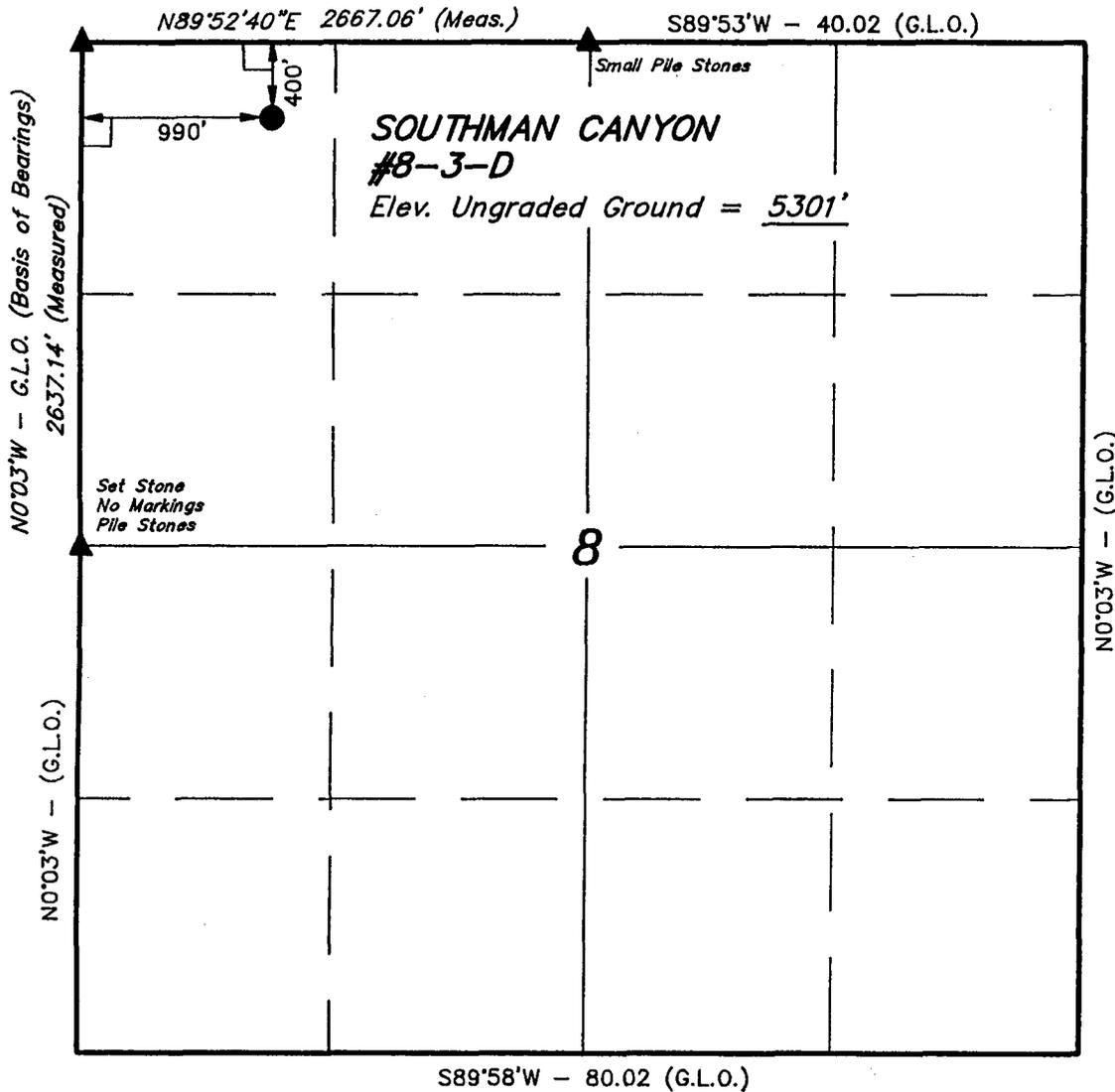
*See Instructions On Reverse Side

T10S, R23E, S.L.B.&M.

SNYDER OIL CORP.

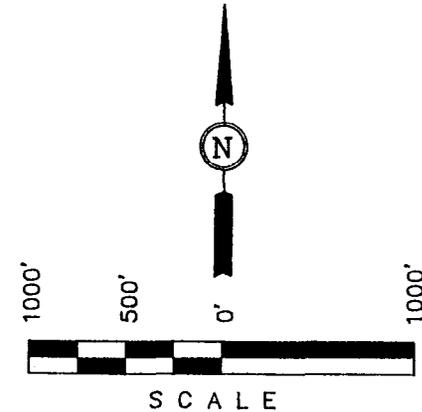
Well location, SOUTHMAN CANYON #8-3-D, located as shown in the NW 1/4 NW 1/4 of Section 8, T10S, R23E, S.L.B.&M. Uintah County Utah.

Marked Stone
in Pile Stones



BASIS OF ELEVATION

BENCH MARK 57 EAM LOCATED IN THE NE 1/4 OF SECTION 29, T9S, R23E, S.L.B.&M. TAKEN FROM THE RED WASH SE. QUADRANGLE, UTAH, UTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5192 FEET.



CERTIFICATE

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.

[Signature]
REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST - VERNAL, UTAH 84078
(801) 789-1017

LEGEND:

- └─┘ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

SCALE 1" = 1000'	DATE SURVEYED: 4-18-94	DATE DRAWN: 5-15-94
PARTY B.B. S.D. D.R.B.	REFERENCES G.L.O. PLAT	
WEATHER COLD	FILE SNYDER OIL CORP.	

SNYDER OIL CORPORATION
Lease #UTU-37355, Southman Canyon #8-3-D
NE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$, Section 8, T10S, R23E
Uintah County, Utah

DRILLING PROGNOSIS

1. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS

Uinta	Surface	Mesaverde	6065'
Green River	910'	Buck Tongue	8515'
Wasatch	4186'	Total Depth	8540'

2. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERAL FORMATIONS

Green River	910'	Water	(Possible)
Wasatch	4186'	Gas	(Primary Objective)
Mesaverde	6065'	Gas	(Primary Objective)

Any shallow water zones encountered will be adequately protected and reported. All potentially productive hydro-carbon zones will be cemented off.

3. PRESSURE CONTROL EQUIPMENT - Schematic Attached

A. Type: Eleven (11) Inch Double Gate Hydraulic BOP with Eleven (11) Inch Annular Preventer and 3,000 psi wellhead.

The Blow-Out Preventer will be equipped as follows:

1. One (1) blind ram (above).
2. One (1) pipe ram (below).
3. Drilling spool with two (2) side outlets (choke side 3-inch minimum, kill side 2-inch minimum).
4. Kill line (2-inch minimum).
5. Two (2) kill line valves, one of which will be a check valve (2-inch minimum).
6. 3-inch (minimum) choke line.
7. Two (2) choke line valves (3-inch minimum).
8. Two (2) adjustable chokes.
9. Pressure gauge on choke manifold.
10. Upper kelly cock valve with handle available.
11. Full opening internal blowout preventer or drill pipe safety valve able to fit all connections.
12. Fill-up line above the uppermost preventer.

B. Pressure Rating: 3,000 psi

3. PRESSURE CONTROL EQUIPMENT - Continued

C. Testing Procedure:

Annular Preventer

At a minimum, the Annular Preventer will be pressure tested to 50% of the 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 blowout preventer drills and tests will be recorded in the International Association of Drilling Contractors (IADC) driller's log.

3. PRESSURE CONTROL EQUIPMENT - Continued

D. Choke Manifold Equipment:

All choke lines will be straight lines unless turns use tee blocks or are targeted with running tees, and will be anchored to prevent whip and vibration.

E. Accumulator:

The accumulator will have sufficient capacity to open the hydraulically-controlled choke line valve (if so equipped), close all rams plus the annular preventer, and retain a minimum of 200 psi above precharge on the closing manifold without the use of the closing unit pumps. The fluid reservoir capacity will be double the accumulator capacity and the fluid level will be maintained at the manufacturer's recommendations.

The BOP system will have two (2) independent power sources to close the preventers. Nitrogen bottles (3 minimum) will be one (1) of these independent power sources and will maintain a charge equal to the manufacturer's specifications.

The accumulator precharge pressure test will be conducted prior to connecting the closing unit to the BOP stack and at least once every six (6) months thereafter. The accumulator pressure will be corrected if the measured precharge pressure is found to be above or below the maximum or minimum limits specified in *Onshore Oil & Gas Order Number 2*.

F. Special Drilling Operations:

In addition to the equipment already specified in Items A through E, above, the following equipment will be in place and operational during air/gas drilling:

1. Properly lubricated and maintained rotating head.
2. Spark arresters on engines or water cooled exhaust.
3. Blooie line discharge 100 feet from well bore and securely anchored.
4. Straight run on blooie line.
5. Deduster equipment (not required for aerated water system).
6. All cuttings and circulating medium(s) shall be directed into a reserve or blooie pit.
7. Float valve above bit.

3. PRESSURE CONTROL EQUIPMENT

F. Special Drilling Operations: Continued

8. Automatic igniter or continuous pilot light on the blooie line (not required for aerated water system).
9. Compressors located in the opposite direction from the blooie line and at a minimum of 100 feet from the well bore.
10. Mud circulating equipment, water, and mud materials (does not have to be pre-mixed) sufficient to maintain the capacity of the hole and circulating tanks or pits.

G. Miscellaneous Information:

The Blow-Out 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*.

The choke manifold and BOP extension rods with hand wheels will be located outside the rig sub-structure. The hydraulic BOP closing unit will be located at least twenty-five (25) feet from the well head but readily accessible to the driller. Exact locations and configurations of the hydraulic BOP closing unit will depend upon the particular rig contracted to drill the Southman Canyon #8-3-D.

A flare line will be installed after the choke manifold, extending 125 feet (minimum) from the center of the drill hole to a separate flare pit.

4. THE PROPOSED CASING AND CEMENTING PROGRAM

A. Casing Program: All New

<u>Hole Size</u>	<u>Casing Size</u>	<u>Wt./Ft.</u>	<u>Grade</u>	<u>Joint</u>	<u>Depth Set</u>
20 "	16 "	Steel	----	----	0- 60' ¹
12-1/4"	8-5/8"	24.0#	J-55	ST&C	0- 400' ²
7-7/8"	4-1/2"	11.6#	M-75	LT&C	0-8540' ²

¹ Conductor optional.

4. THE PROPOSED CASING AND CEMENTING PROGRAM

A. Casing Program: Continued

² Minimum design factors:

collapse = 1.125	tension (joint) = 1.800
burst = 1.000	tension (pipe body) = 1.500

The surface casing will have centralizers on the bottom three (3) joints joint of casing, with a minimum of one (1) centralizer per joint starting with the shoe joint.

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. Cementing Program:

Surface Conductor - Set with approximately five (5) cubic yards (yd³) of Redi-Mix cement, circulated back to surface.

Surface Casing - Set with approximately 300 sx of Class "G" cement, circulated back to surface.

Production Casing - Lead with approximately 1110 sx Halliburton "Light" cement.

Tail with approximately 500 sx Class "G" (or 50/50 Poz-Mix) cement, as applicable.

A sufficient quantity of tail cement will be utilized to achieve full coverage across the Mesaverde Formation. Estimated top of cement ≈ 3986'.

The above 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.

4. THE PROPOSED CASING AND CEMENTING PROGRAM

B. Cementing Program: Continued

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. MUD PROGRAM - Visual Monitoring

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0- 400'	Fresh Water/Gel	8.8- 9.2	28-35	No Control
400-8540'	Aerated Brine	8.2- 8.8	30-35	+ 25 cc's
As Needed ¹	Salt Water/Gel	9.8-10.5	35-45	15-25 cc's

¹ The drilling fluids system will consist of air/mist (with brine water as the base fluid) for as long and/or as deep as possible. Should hole conditions deteriorate prior to reaching total depth, an alternative drilling fluids system would be utilized consisting of a salt/gel mud (with brine water as the base fluid).

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.

No chromate additives will be used in the mud system on Federal or Indian lands without prior approval of the Bureau of Land Management in order to ensure adequate protection of fresh water aquifers.

Hazardous substances specifically listed by the Environmental Protection Agency as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing or completion operations.

6. EVALUATION PROGRAM

Logs : DLL/SP/GR¹ - from 8540' to 400'
 FDC/CNL/SP/GR¹ - from 8540' to 400'

¹ Pull Gamma Ray to surface.

DST's : None anticipated.

Cores : None anticipated.

6. EVALUATION PROGRAM - Continued

The proposed Evaluation Program may change at the discretion of the well site geologist, with prior approval from the Authorized Officer, Bureau of Land Management.

Stimulation : No stimulation or frac treatment has been formulated for this test at this time. The drill site, as approved, will be of sufficient size to accommodate all completion activities.

Whether the well is completed as a dry hole or as a producer, *Well Completion and Recompletion Report and Log* (Form #3160-4) will be submitted to the Vernal District Office not later than thirty (30) days after the completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164.

Two (2) copies of all logs, core descriptions, core analyses, well test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form #3160-4. Samples (cuttings, fluids, and/or gases) will be submitted when requested by the Authorized Officer, Vernal District Office, Bureau of Land Management, 170 South 500 East, Vernal, Utah 84078, Telephone: (801) 789-1362.

7. ABNORMAL CONDITIONS

No abnormal temperatures or pressures are anticipated. No H₂S has been encountered in or known to exist from previous wells drilled to similar depths in the general area.

Maximum anticipated bottom hole pressure equals approximately 4,100 psi (as calculated in the Downspacing Hearing Study) and maximum anticipated surface pressure equals approximately 2221 psi (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot of hole).

8. ANTICIPATED STARTING DATES AND NOTIFICATION OF OPERATIONS

A. Anticipated Starting Dates:

Anticipated Commencement Date	-	October 15, 1994
Drilling Days	-	Approximately 14 Days
Completion Days	-	Approximately 10 days

8. ANTICIPATED STARTING DATES AND NOTIFICATION OF OPERATIONS

B. Notification of Operations:

Vernal District Office, Bureau of Land Management

Address : 170 South 500 East; Vernal, Utah 84078
Phone : (801) 789-1362
Fax : (801) 789-3634

In the event after-hours approvals are necessary, please contact one of the following individuals:

<u>Contact Title</u>	<u>Contact Name</u>	<u>Home Phone</u>
Petroleum Engineer	Gerald E. Kenczka	(801) 781-1190
Petroleum Engineer	Ed Forsman	(801) 789-7077

The Vernal District Office, Bureau of Land Management will be notified at least twenty-four (24) hours PRIOR to the commencement of the following activities:

1. Spudding of the well. This oral report will be followed up with a Sundry Notice (Form 3160-5);
2. initiating pressure tests of the blow-out preventer and related equipment;
3. running casing and cementing of ALL casing strings.

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR, Part 3160), and this approved Application for Permit to Drill. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved Application for Permit to Drill must be on location during construction, drilling and completion operations. The following items are emphasized:

DRILLING/PRODUCING OPERATING STANDARDS

There shall be no deviation from the proposed drilling and/or workover program as approved. Safe drilling and operating practices must be observed.

8. ANTICIPATED STARTING DATES AND NOTIFICATION OF OPERATIONS

B. Notification of Operations: Continued

All wells, whether drilling, producing, suspended or abandoned shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, the lease serial number, the well number and the surveyed description of the well.

Any changes in operations must have prior approval from the Authorized Officer (AO), Vernal District Office, Bureau of Land Management.

Pressure tests are required before drilling out from under all casing strings set and cemented in place. Blowout preventer controls will remain in use until the well is either completed or abandoned. Preventers will be inspected and operated at least daily to insure good mechanical working order, and this inspection will be recorded on the daily drilling report. All BOP tests must be recorded in the daily drilling report. **NOTIFY RESOURCE AREA PETROLEUM ENGINEER AT LEAST TWENTY-FOUR (24) HOURS IN ADVANCE OF PRESSURE TESTS.**

In accordance with *Onshore Oil & Gas Order Number 1*, this well will be reported on MMS Form #3160-6, *Monthly Report of Operations and Production*, starting with the month in which operations commence and continuing each month until the well is physically plugged and abandoned. This report will be filed directly with the Royalty Management Program, Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217.

All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL-3A will be reported to the Vernal District Office. Major events will be reported verbally within twenty-four (24) hours and will be followed with a written report within fifteen (15) days. "Other than Major Events" will be reported in writing within fifteen (15) days. "Minor Events" will be reported on the *Monthly Report of Operations and Production* (Form #3160-6)

No well abandonment operations will be commenced without the prior approval of the Authorized Officer. In the case of newly-drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the Area Petroleum Engineer.

8. ANTICIPATED STARTING DATES AND NOTIFICATION OF OPERATIONS

B. Notification of Operations: Continued

A *Notice of Intention to Abandon* (Form #3160-5) will be filed with the Authorized Officer within fifteen (15) days following the granting of oral approval to plug and abandon.

Upon completion of approved plugging, a regulation marker will be erected in accordance with 43 CFR 3162.6. The following information will be permanently placed on the marker with a plate, cap, or beaded-on with a welding torch: Company Name, Well Name and Number, Location by Quarter/Quarter, Section, Township, Range, and the Federal Lease Number.

A *Subsequent Report of Abandonment* (Form #3160-5) will be submitted within thirty (30) days following the actual plugging of the well bore. This report will indicate where plugs were placed and the current status of surface restoration operations. If surface restoration has not been completed at that time, a follow-up report on Form #3160-5 will be filed when all surface restoration work has been completed and the location is considered ready for final inspection.

Pursuant to NTL-4A, lessees and operators are authorized to vent/flare gas during initial well evaluation tests, not exceeding a period of thirty (30) days or the production of fifty (50) MMCF of gas, whichever occurs first. An application must be filed with the Authorized Officer, and approval received, for any venting/flaring of gas beyond the initial thirty (30) day or otherwise authorized test period.

Not later than the 5th business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site, or resumes production in the case of a well which has been off production for more than ninety (90) days, the operator shall notify the Authorized Officer by letter or "*Sundry Notice*", of the date on which such production has begun or resumed. The notification shall provide as a minimum, the following informational items:

- a. Operator name, address, and telephone number
- b. Well name and number
- c. Well location " $\frac{1}{4}$, $\frac{1}{4}$, Section, Township, Range, P.M."

8. ANTICIPATED STARTING DATES AND NOTIFICATION OF OPERATIONS

B. Notification of Operations:

The notification shall provide as a minimum, the following informational items: continued

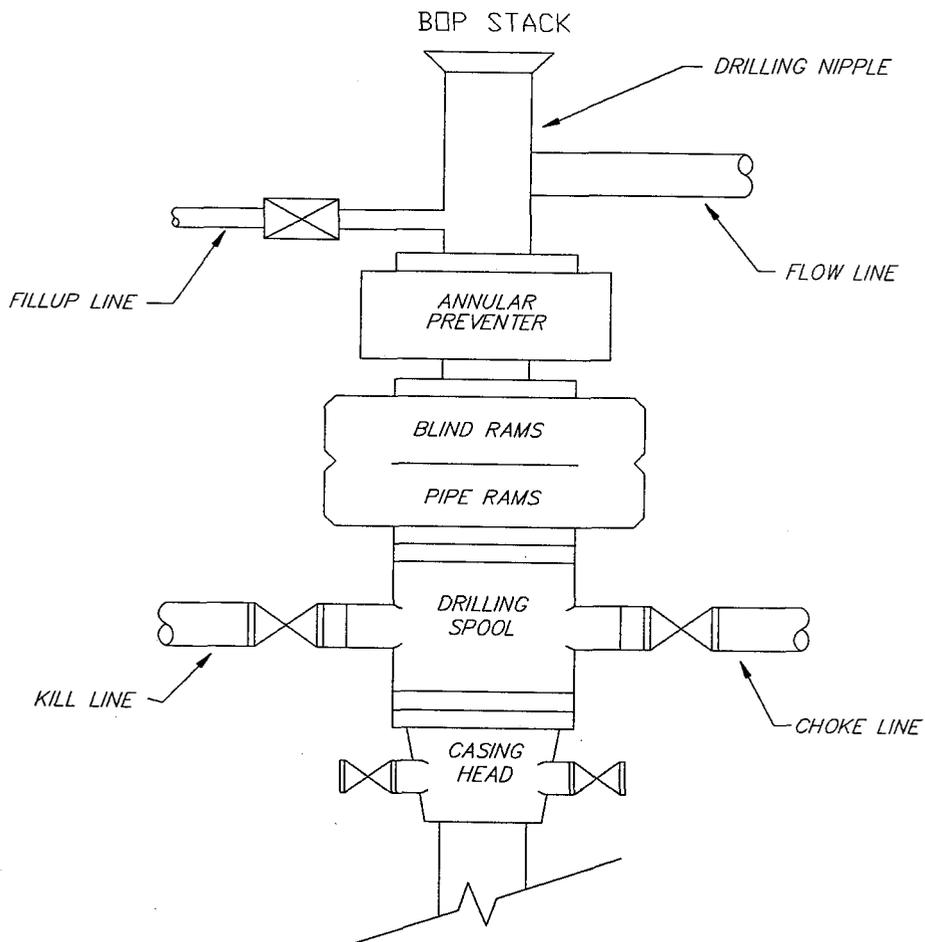
- d. Date well was placed in a producing status
- e. The nature of the wells production, i.e.: crude oil casing gas, or natural gas and entrained liquid hydrocarbons.
- f. The OCS, Federal or Indian lease prefix and number on which the well is located. Otherwise, the non-Federal or non-Indian land category, ie.: state or private.

Within sixty (60) days following construction of a new tank battery, a site facility diagram of the battery showing actual conditions and piping must be submitted to the Authorized Officer. Facility diagrams shall be filed within sixty (60) days after existing facilities are modified. For complete information as to what is required on these diagrams, please refer to 43 CFR 3162.7-4(d).

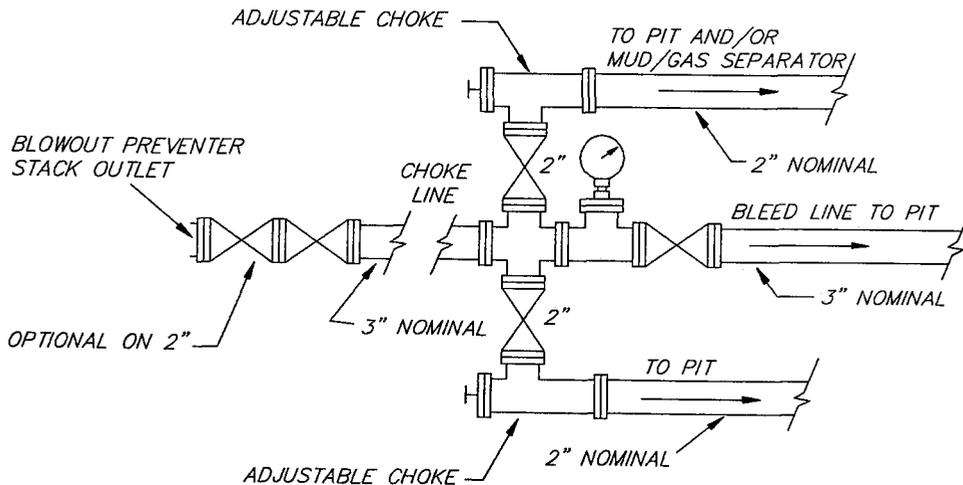
Pursuant to *Onshore Oil & Gas Order Number 1*, lessees and operators have the responsibility to see that their exploration, development, production, and construction operations are conducted in such a manner which conforms with applicable federal laws and regulations and with state and local laws and regulations to the extent that such State and local laws are applicable to operations on Federal and Indian lands.

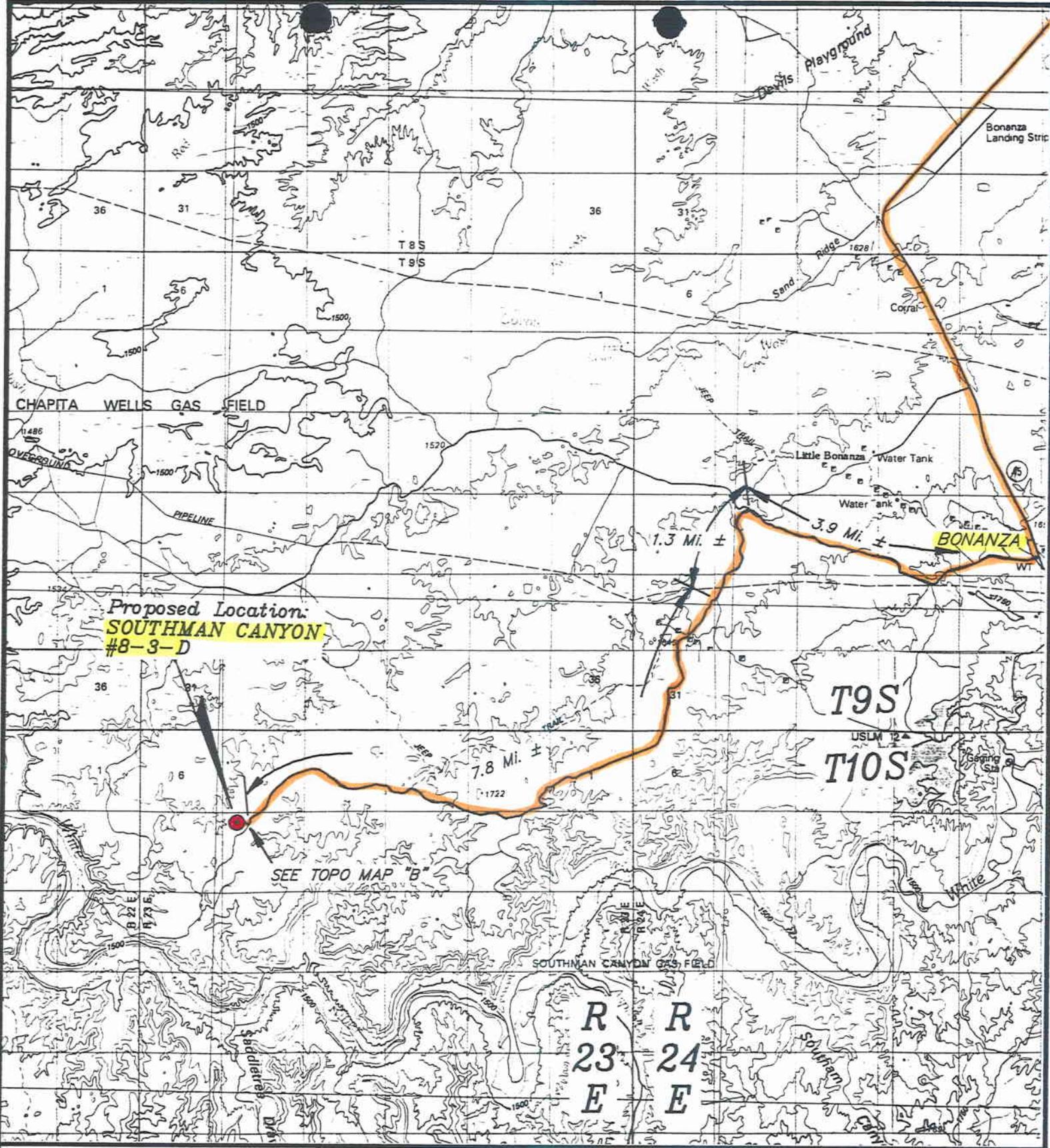
SNYDER OIL CORPORATION

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



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





Proposed Location:
SOUTHMAN CANYON
 #8-3-D

SEE TOPO MAP "B"

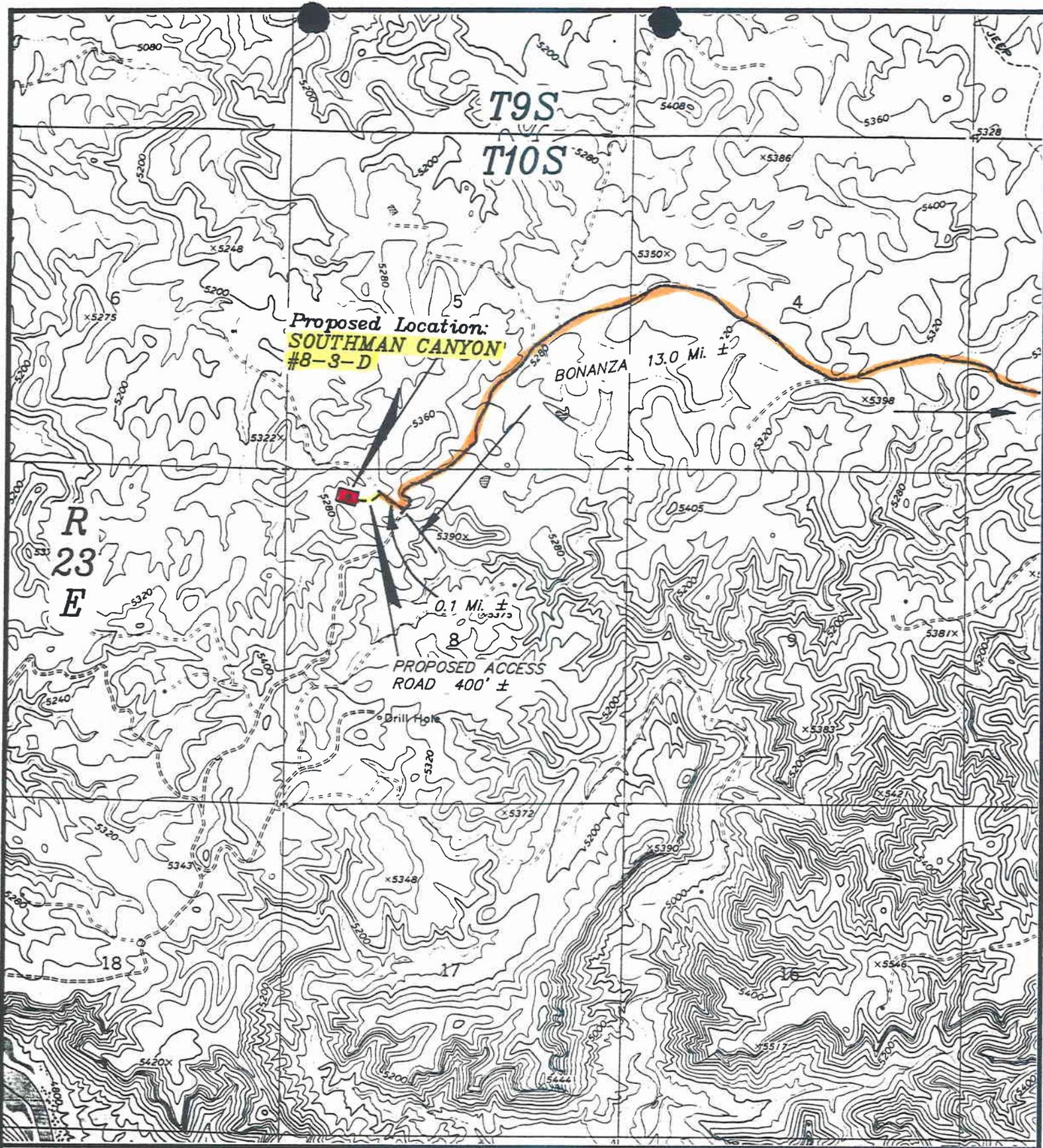
TOPOGRAPHIC
 MAP "A"

DATE: 5-3-94 C.B.T.



SNYDER OIL CORP.

SOUTHMAN CANYON #8-3-D
 SECTION 8, T10S, R23E, S.L.B.&M.
 400' FNL 990' FWL



Proposed Location:
SOUTHMAN CANYON
#8-3-D

BONANZA 13.0 Mi. ±

0.1 Mi. ±
 PROPOSED ACCESS
 ROAD 400' ±

Drill Hole

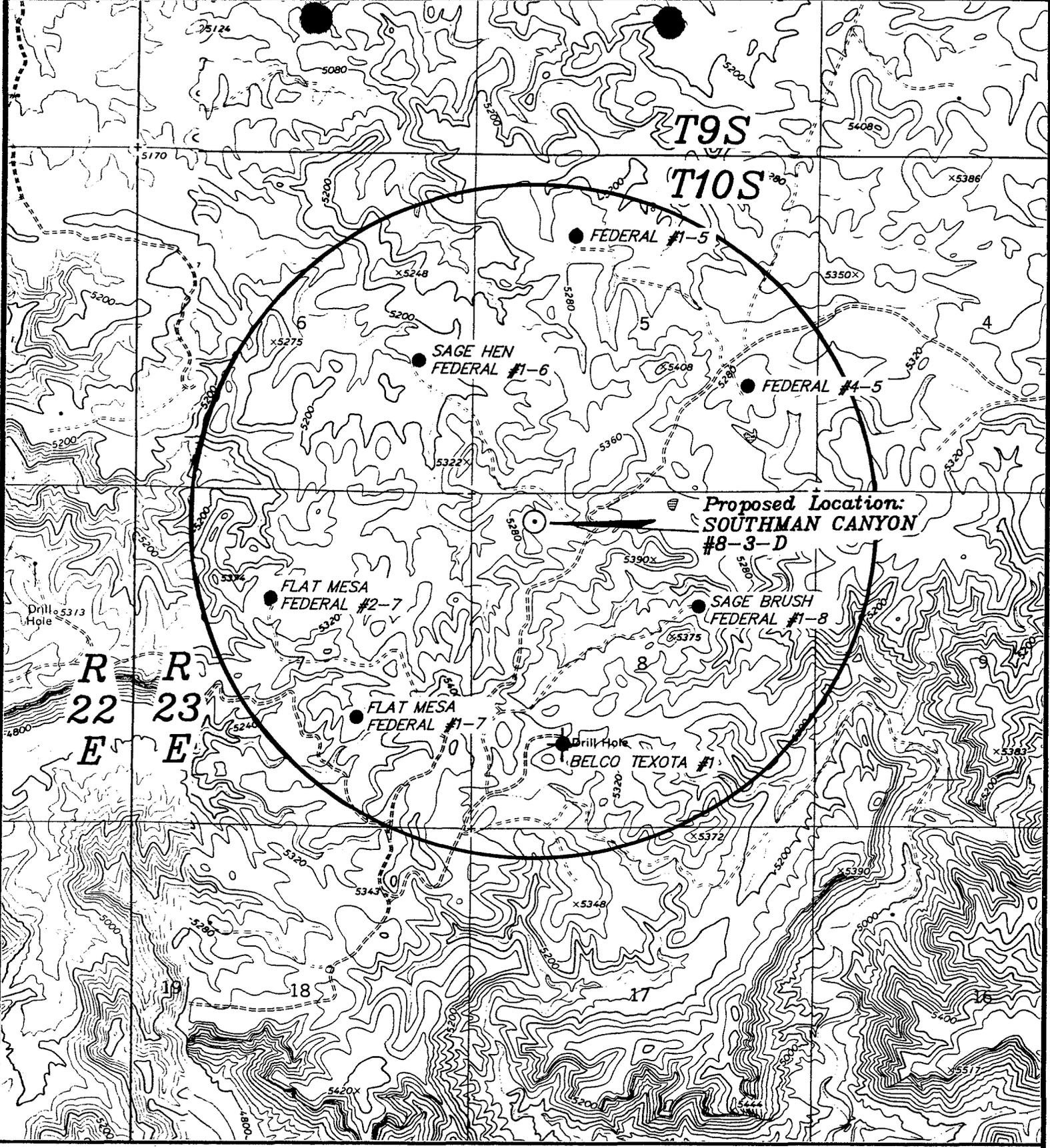
R
23
E

T9S
T10S

TOPOGRAPHIC
 MAP "B"
 SCALE: 1" = 2000'
 DATE: 5-3-94 C.B.T.



SNYDER OIL CORP.
 SOUTHMAN CANYON #8-3-D
 SECTION 8, T10S, R23E, S.L.B.&M.
 400' FNL 990' FWL



Proposed Location:
**SOUTHMAN CANYON
 #8-3-D**

LEGEND:

- ⊕ = Water Wells
- ◆ = Abandoned Wells
- = Temporarily Abandoned Wells
- ∅ = Disposal Wells
- = Drilling Wells
- = Producing Wells
- ◆ = Shut-in Wells



SNYDER OIL CORP.

SOUTHMAN CANYON #8-3-D
 SECTION 8, T10S, R23E, S.L.B.&M.
TOP O MAP "C"

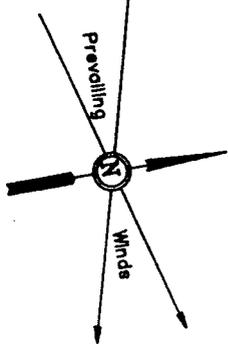
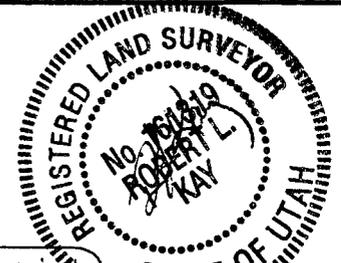
DATE: 5-16-94 C.B.T.

SNYDER OIL CORP.

LOCATION LAYOUT FOR

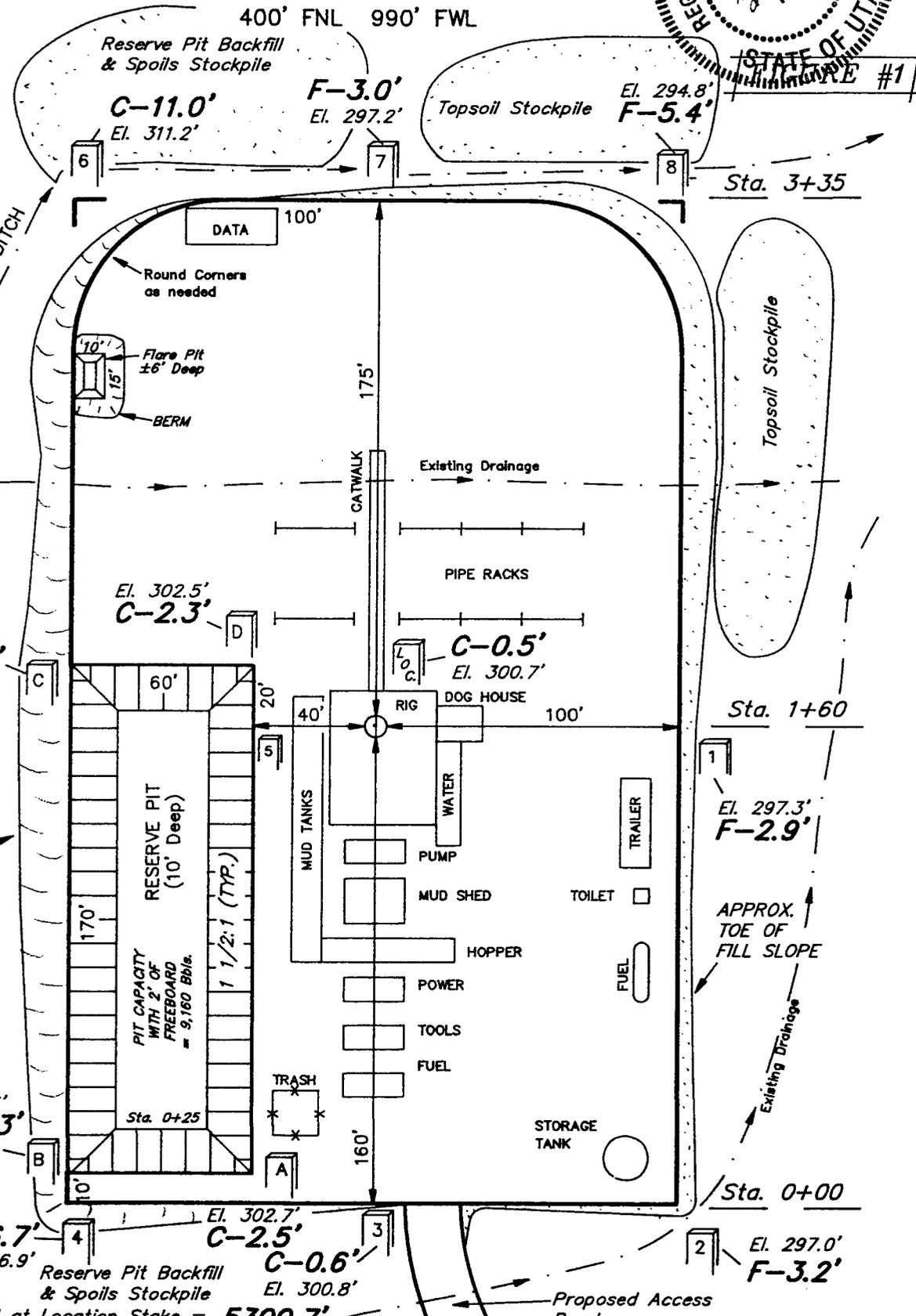
SOUTHMAN CANYON #8-3-D
SECTION 8, T10S, R23E, S.L.B.&M.

400' FNL 990' FWL



STATE OF UTAH
 PLAT #1

SCALE: 1" = 50'
 DATE: 5-15-94
 Drawn By: D.R.B.



NOTE:
 FLARE PIT IS TO BE
 LOCATED A MINIMUM
 OF 100' FROM THE
 WELL HEAD.

NOTE:
 PLACE SPOILS EAST
 OF PIT, IF DRAINAGE
 WILL WORK.

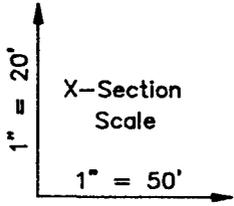
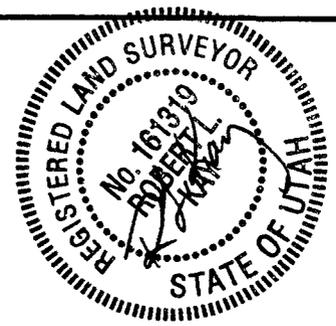
Elev. Ungraded Ground at Location Stake = **5300.7'**
 Elev. Graded Ground at Location Stake = **5300.2'**

UINTAH ENGINEERING & LAND SURVEYING
 85 So. 200 East • Vernal, Utah 84078 • (801) 789-1017

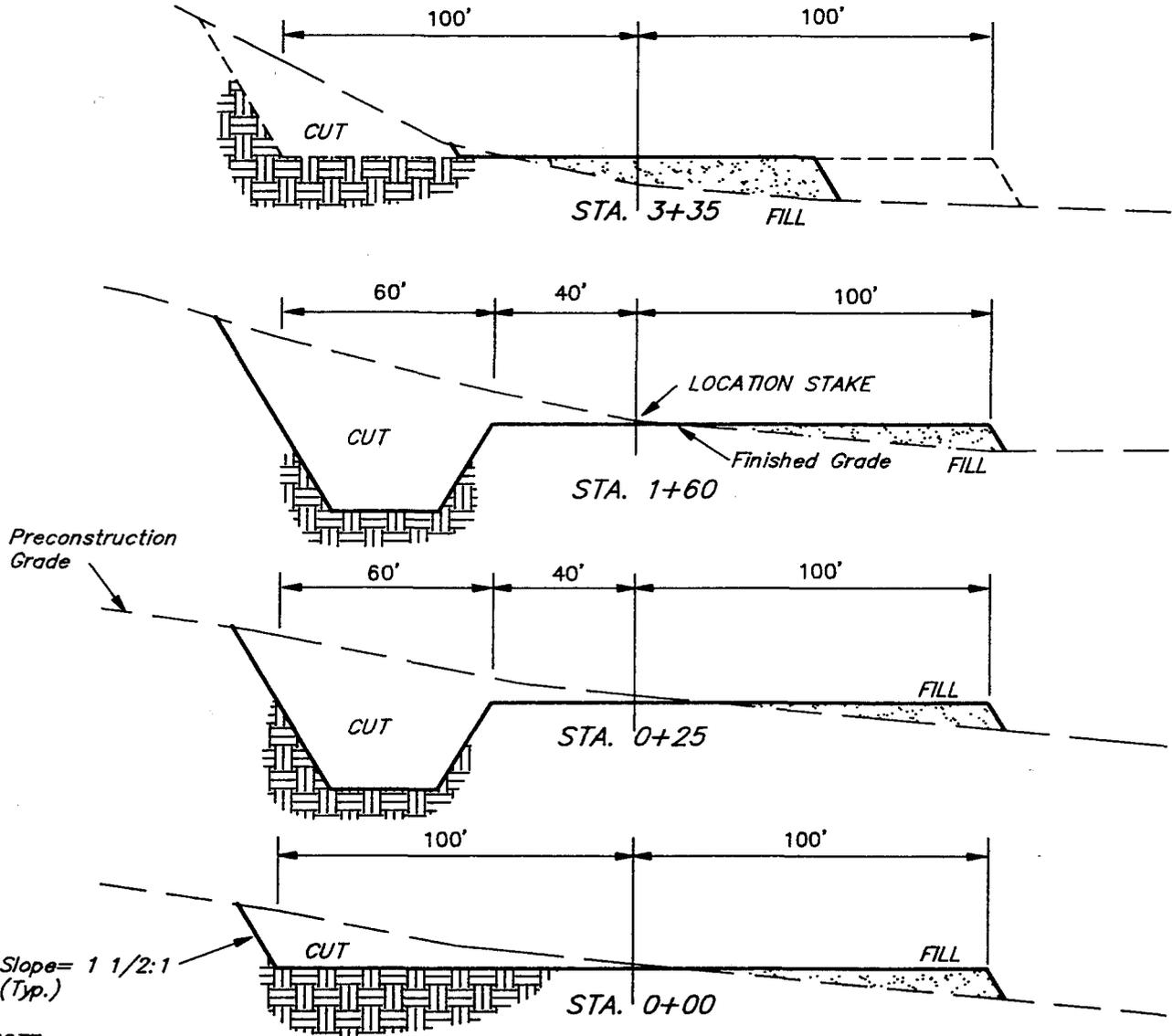
SNYDER OIL CORP.

TYPICAL CROSS SECTIONS FOR

**SOUTHMAN CANYON #8-3-D
SECTION 8, T10S, R23E, S.L.B.&M.
400' FNL 990' FWL**



DATE: 5-15-94
Drawn By: D.R.B.



NOTE:

Topsoil should not be Stripped Below Finished Grade on Substructure Area.

FIGURE #2

APPROXIMATE YARDAGES

CUT	
(6") Topsoil Stripping	= 1,240 Cu. Yds.
Remaining Location	= 7,630 Cu. Yds.
TOTAL CUT	= 8,870 CU.YDS.
FILL	= 4,350 CU.YDS.

EXCESS MATERIAL AFTER 5% COMPACTION	= 4,290 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	= 2,550 Cu. Yds.
EXCESS CUT MATERIAL	= 1,740 Cu. Yds.

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East • Vernal, Utah 84078 • (801) 789-1017

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**

RECEIVED
SUBMIT IN TRIPPLICATE*
(Other than for State use)
SEP 26 1994
BUREAU OF OIL, GAS & MINING

FORM APPROVED
OMB NO. 1004-0136
Expires: February 28, 1995

LEASE DESIGNATION AND SERIAL NO.
UTU-37355

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/>			6. IF INDIAN, ALLOTTEE OR TRIBE NAME Not Applicable	
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input checked="" type="checkbox"/>			7. UNIT AGREEMENT NAME Not Applicable	
2. NAME OF OPERATOR <u>Snyder Oil Corporation</u> Phone: (303) 592-8500			8. FARM OR LEASE NAME, WELL NO. <u>Southman Canyon 8-3-D</u>	
3. ADDRESS AND TELEPHONE NO. <u>1625 Broadway, Suite 2200; Denver, Colorado 80202</u>			9. AP WELL NO.	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*) At surface <u>400' FNL, 990' FWL (NE$\frac{1}{4}$NW$\frac{1}{4}$NW$\frac{1}{4}$) Section 8, T10S, R23E</u> At proposed prod. zone <u>Same as above.</u>			10. FIELD AND POOL, OR WILDCAT	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* <u>Approximately twelve (12) miles southwest of Bonanza, Utah</u>			11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA <u>Section 8, T10S, R23E</u>	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any) <u>400'</u>		16. NO. OF ACRES IN LEASE <u>1920.00</u>	17. NO. OF ACRES ASSIGNED TO THIS WELL <u>80</u>	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. <u>2900' ±</u>		19. PROPOSED DEPTH <u>8540'</u>	20. ROTARY OR CABLE TOOLS <u>Rotary</u>	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) <u>5301' GR</u>			22. APPROX. DATE WORK WILL START* <u>October 15, 1994</u>	

PROPOSED CASING AND CEMENTING PROGRAM (All New)

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8" J-55	24.0#	0- 400'	300 sx circulated to surface *
7-7/8"	4-1/2" M-75	11.6#	0-8540'	1610 sx cement

* Cement volumes may change due to hole size. Calculate from Caliper Log.

EIGHT-POINT RESOURCE PROTECTION PLAN ATTACHED.

I hereby certify that Snyder Oil Corporation is authorized by the proper Lease Interest Owners to conduct lease operations associated with this Application for Permit to Drill the Southman Canyon Federal #8-3-D, Federal Lease #UTU-37355. Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Snyder Oil Corporation, Nationwide Bond #WY-2272, who will be responsible for compliance with all the terms and conditions of that portion of the lease associated with this Application.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED Tim A. Burns TITLE Drilling Engineer DATE August 11, 1994

(This space for Federal or State office use)

PERMIT NO. 43-047-32552 APPROVAL DATE 10/14/94
 Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
 CONDITIONS OF APPROVAL, IF ANY:
 APPROVED BY _____ TITLE _____ DATE _____
 APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING
 DATE: 10/14/94
 BY: J. Matthews
 WELL SPACING Case 179-6

*See Instructions On Reverse Side

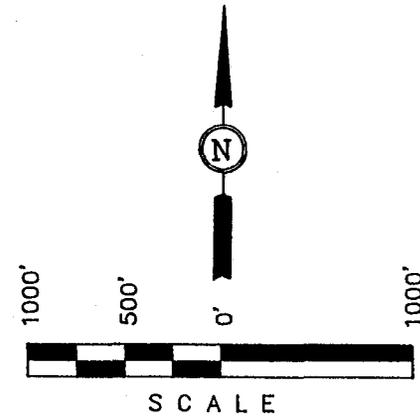
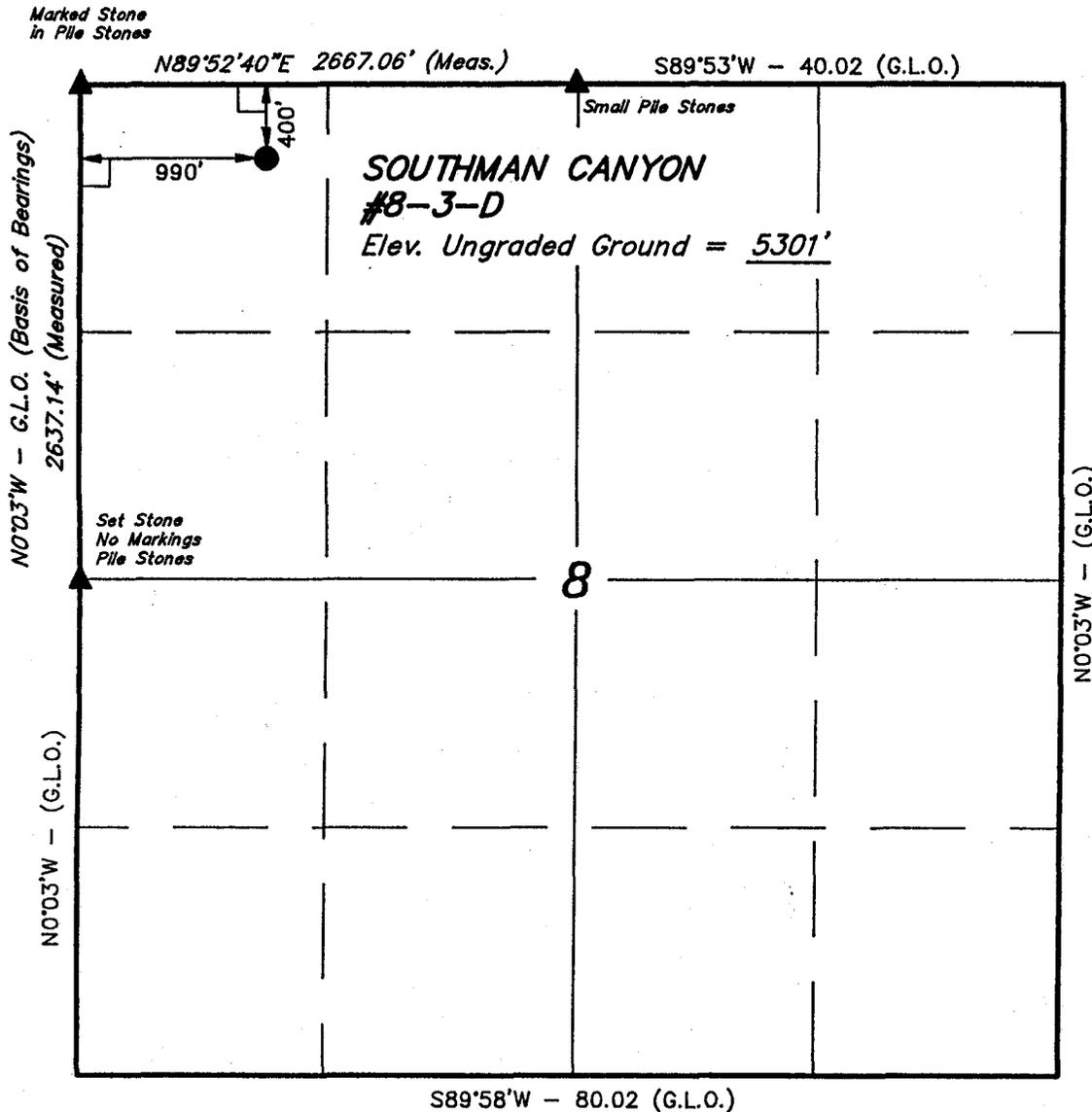
T10S, R23E, S.L.B.&M.

SNYDER OIL CORP.

Well location, SOUTHMAN CANYON #8-3-D, located as shown in the NW 1/4 NW 1/4 of Section 8, T10S, R23E, S.L.B.&M. Uintah County Utah.

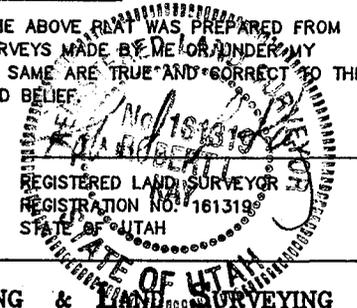
BASIS OF ELEVATION

BENCH MARK 57 EAM LOCATED IN THE NE 1/4 OF SECTION 29, T9S, R23E, S.L.B.&M. TAKEN FROM THE RED WASH SE. QUADRANGLE, UTAH, UTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5192 FEET.



CERTIFICATE

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.



LEGEND:

- └─┘ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

UINTAH ENGINEERING & SURVEYING 85 SOUTH 200 EAST - VERNAL, UTAH 84078 (801) 789-1017		
SCALE 1" = 1000'	DATE SURVEYED: 4-18-94	DATE DRAWN: 5-15-94
PARTY B.B. S.D. D.R.B.	REFERENCES G.L.O. PLAT	
WEATHER COLD	FILE SNYDER OIL CORP.	

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 09/26/94

API NO. ASSIGNED: 43-047-32552

WELL NAME: SOUTHMAN CANYON 8-3-D
OPERATOR: SNYDER OIL CORPORATION (N1305)

PROPOSED LOCATION:
NWNW 08 - T10S - R23E
SURFACE: 0400-FNL-0990-FWL
BOTTOM: 0400-FNL-0990-FWL
UINTAH COUNTY
NATURAL BUTTES FIELD (630)

INSPECT LOCATION BY: / /		
TECH REVIEW	Initials	Date
Engineering		
Geology		
Surface		

LEASE TYPE: FED
LEASE NUMBER: UTU-37355

PROPOSED PRODUCING FORMATION: WSMVD

RECEIVED AND/OR REVIEWED:

Y Plat
Y Bond: Federal State Fee
(Number WY-2272)
N Potash (Y/N)
N Oil shale (Y/N)
Y Water permit
(Number _____)
RDCC Review (Y/N)
(Date: _____)

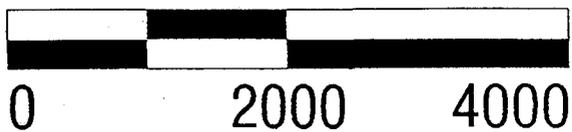
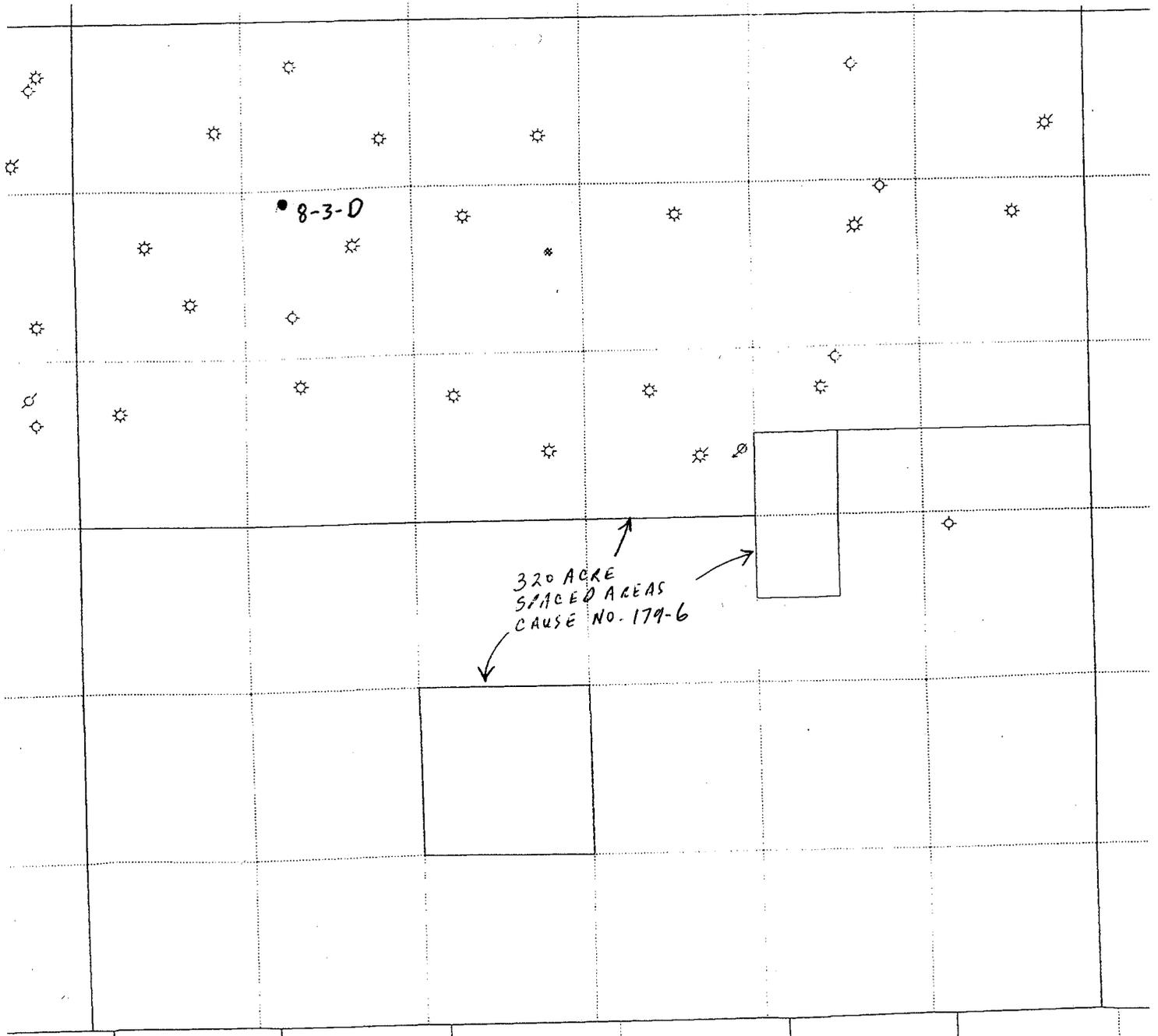
LOCATION AND SITING:

___ R649-2-3. Unit: _____
___ R649-3-2. General.
___ R649-3-3. Exception.
 Drilling Unit.
Board Cause no: 179-6
Date: 5/27/94

COMMENTS: *Interior Drly units (Cause no. 179-6). Set back of no less than 330' from exterior boundary of each interior drly. unit.*

STIPULATIONS: _____

SNYDER OIL CORP
SOUTHMAN CANYON DEVELOPMENT
SECTIONS 4,5,8,10 T10S, R23E
UINTAH COUNTY





State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor

Ted Stewart
Executive Director

James W. Carter
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340
801-359-3940 (Fax)
801-538-5319 (TDD)

October 14, 1994

Snyder Oil Corporation
1625 Broadway, Suite 2200
Denver, Colorado 80202

Re: Southman Canyon 8-3-D Well, 400' FNL, 990' FWL, NW NW, Sec. 8, T. 10 S., R. 23 E., Uintah County, Utah

Gentlemen:

Pursuant to the order issued by the Board of Oil, Gas and Mining in Cause No. 179-6 dated May 27, 1994, and Utah Admin. R.649-3-4, Permitting of Wells to be Drilled, Deepened or Plugged-Back, approval to drill the referenced well is hereby granted.

In addition, the following specific actions are necessary to fully comply with this approval:

1. Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules.
2. Notification to the Division within 24 hours after drilling operations commence.
3. Submittal of Entity Action Form, Form 6, within five working days following commencement of drilling operations and whenever a change in operations or interests necessitates an entity status change.
4. Submittal of the Report of Water Encountered During Drilling, Form 7.
5. Prompt notification prior to commencing operations, if necessary, to plug and abandon the well. Notify Frank R. Matthews, Petroleum Engineer, (Office) (801)538-5340, (Home) (801)476-8613, or K. Michael Hebertson, Reclamation Specialist, (Home) (801)269-9212.

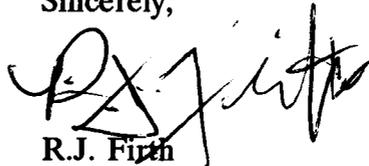


Page 2
Snyder Oil Corporation
Southman Canyon 8-3-D Well
October 14, 1994

6. Compliance with the requirements of Utah Admin. R. 649-3-20, Gas Flaring or Venting, if the well is completed for production.

This approval shall expire one year after date of issuance unless substantial and continuous operation is underway or a request for an extension is made prior to the approval expiration date. The API number assigned to this well is 43-047-32552.

Sincerely,



R.J. Firth
Associate Director

ldc
Enclosures
cc: Uinatah County Assessor
Bureau of Land Management, Vernal District Office
WOI1

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED IN THE OFFICE OF THE DIRECTOR
OCT 28 1994
(Other instructions on reverse side)

FORM APPROVED
OMB NO. 1004-0136
Expires: February 28, 1995

NOS 519/94

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK
 DRILL DEEPEN

b. TYPE OF WELL
 OIL WELL GAS WELL OTHER SINGLE ZONE MULTIPLE ZONE

2. NAME OF OPERATOR
 Snyder Oil Corporation Phone: (303) 592-8500

3. ADDRESS AND TELEPHONE NO.
 1625 Broadway, Suite 2200; Denver, Colorado 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
 At surface
 400' FNL, 990' FWL (NE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$) Section 8, T10S, R23E
 At proposed prod. zone
 Same as above.

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 Approximately twelve (12) miles southwest of Bonanza, Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any) 400'

16. NO. OF ACRES IN LEASE 1920.00

17. NO. OF ACRES ASSIGNED TO THIS WELL 80

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 2900' ±

19. PROPOSED DEPTH 8540'

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.) 5301' GR

22. APPROX. DATE WORK WILL START* October 15, 1994

5. LEASE DESIGNATION AND SERIAL NO.
 UTU-37355

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
 Not Applicable

7. UNIT AGREEMENT NAME
 Not Applicable

8. FARM OR LEASE NAME, WELL NO.
 Southman Canyon 8-3-D

9. API WELL NO.

10. FIELD AND POOL, OR WILDCAT
 Southman Canyon

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
 Section 8, T10S, R23E

12. COUNTY OR PARISH
 Uintah

13. STATE
 Utah

23. PROPOSED CASING AND CEMENTING PROGRAM (All New)

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8" J-55	24.0#	0- 400'	300 sx circulated to surface *
7-7/8"	4-1/2" M-75	11.6#	0-8540'	1610 sx cement

* Cement volumes may change due to hole size. Calculate from Caliper Log.

SEP 28 1994

EIGHT-POINT RESOURCE PROTECTION PLAN ATTACHED.

I hereby certify that Snyder Oil Corporation is authorized by the proper Lease Interest Owners to conduct lease operations associated with this Application for Permit to Drill the Southman Canyon Federal #8-3-D, Federal Lease #UTU-37355. Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Snyder Oil Corporation, Nationwide Bond #WY-2272, who will be responsible for compliance with all the terms and conditions of that portion of the lease associated with this Application.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED Tim A. Burns TITLE Drilling Engineer DATE August 11, 1994
 Tim A. Burns

(This space for Federal or State office use)

PERMIT NO. 43-047-32552 NOTICE OF APPROVAL

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY [Signature] TITLE ASSISTANT DISTRICT MANAGER MINERALS DATE OCT 17 1994

*See Instructions On Reverse Side

CONDITIONS OF APPROVAL ATTACHED TO OPERATOR'S COPY

Ut080-4m-156

CONDITIONS OF APPROVAL
APPLICATION FOR PERMIT TO DRILL

Company/Operator: Snyder Oil Corporation

Well Name & Number: Southman Canyon 8-3-D

API Number: 43-047-32552

Lease Number: UTU-37355

Location: NWNW Sec. 08 T.10S R. 23E

NOTIFICATION REQUIREMENTS

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

For more specific details on notification requirements, please check the Conditions of Approval for Notice to Drill and Surface Use Program.

CONDITIONS OF APPROVAL FOR NOTICE TO DRILL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas Orders, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.

Be aware fire restrictions may be in effect when location is being constructed and/or when well is being drilled. Contact the appropriate Surface Management Agency for information.

A. DRILLING PROGRAM

1. Estimated Depth at Which Oil, Gas, Water, or Other Mineral Bearing Zones are Expected to be Encountered

Report ALL water shows and water-bearing sands to Tim Ingwell of this office. Copies of State of Utah form OGC-8-X are acceptable. If noticeable water flows are detected, submit samples to this office along with any water analyses conducted.

All usable water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling, will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

2. Pressure Control Equipment

The BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc., for a 3M system and individual components shall be operable as designed. Chart recorders shall be used for all pressure tests.

Test charts, with individual test results identified, shall be maintained on location while drilling and shall be made available to a BLM representative upon request.

If an air compressor is on location and is being utilized to provide air for the drilling medium while drilling, the special drilling requirements in Onshore Oil and Gas Order No. 2, regarding air or gas drilling shall be adhered to. If a mist system is being utilized then the requirement for a deduster shall be waived.

The Vernal District Office shall be notified, at least 24 hours prior to initiating the pressure tests, in order to have a BLM representative on location during pressure testing.

3. Casing Program and Auxiliary Equipment

Surface casing shall have centralizers on the bottom three joints, with a minimum of one centralizer per joint.

As a minimum, the usable water and oil shale resources shall be isolated and/or protected by having a cement top for the production casing at least 200 ft. above the top of the Mahogany Oil Shale zone, identified at ± 2107 ft.. If gilsonite is encountered while drilling, it shall be isolated and/or protected via the cementing program.

The Vernal District Office shall be notified at least 24 hours prior to the running and cementing of all casing strings, in order to have a BLM representative on location while running and cementing all casing strings.

4. Mud Program and Circulating Medium

Hazardous substances specifically listed by the EPA as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing, or completion operations.

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

5. Coring, Logging and Testing Program

Daily drilling and completion progress reports shall be submitted to this office on a weekly basis.

All Drill Stem tests (DST) shall be accomplished during daylight hours, unless specific approval to start during other hours is obtained from the AO. However, DSTs may be allowed to continue at night if the test was initiated during daylight hours and the rate of flow is stabilized and if adequate lighting is available (i.e., lighting which is adequate for visibility and vaporproof for safe operations). Packers can be released, but tripping should not begin before daylight unless prior approval is obtained from the AO.

A cement bond log (CBL) will be run from the production casing shoe to ± 1907 ft. and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.

Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core analyses, well-test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. Samples (cuttings, fluids, and/or gases) will be submitted when requested by the AO.

6. Notifications of Operations

No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the AO. If operations are to be suspended, prior approval of the AO will be obtained and notification given before resumption of operations.

The Vernal District Office shall be notified, during regular work hours (7:45 a.m.-4:30 p.m., Monday through Friday except holidays), at least 24 hours prior to spudding the well.

Operator shall report production data to MMS pursuant to 30 CFR 216.5 using form MMS/3160.

Immediate Report: Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported in accordance with the requirements of NTL-3A or its revision.

If a replacement rig is contemplated for completion operations, a "Sundry Notice" (Form 3160-5) to that effect will be filed, for prior approval of the AO, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig.

The date on which production is commenced or resumed will be construed for oil wells as the date on which liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which liquid hydrocarbons are first produced into a permanent storage facility, whichever first occurs; and, for gas wells as the date on which associated liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which gas is first measured through permanent metering facilities, whichever first occurs.

Should the well be successfully completed for production, the AO will be notified when the well is placed in a producing status. Such notification will be sent by telegram or other written communication, not later than five (5) days following the date on which the well is placed on production.

Gas produced from this well may not be vented or flared beyond an initial authorized test period of 30 days or 50 MMCF following its completion, whichever occurs first, without the prior written approval of the Authorized Officer. Should gas be vented or flared without approval beyond the authorized test period, the operator may be directed to shut-in the well until the gas can be captured or approval to continue venting or flaring as uneconomic is granted and the operator shall be required to compensate the lessor for that portion of the gas vented or flared without approval which is determined to have been avoidably lost.

A schematic facilities diagram as required by 43 CFR 3162.7-2, 3162.7-3, and 3162.7-4 shall be submitted to the appropriate District Office within thirty (30) days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with 43 CFR 3162.7-4.

No well abandonment operations will be commenced without the prior approval of the AO. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the AO. A "Subsequent Report of Abandonment" Form 3160-5, will be filed with the AO within thirty (30) days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the AO or his representative, or the appropriate Surface Managing Agency.

7. Other Information

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

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

Gas meter runs for each well will be located within 500 feet of the wellhead. The gas flowline will be buried or anchored down from the wellhead to the meter and within 500 feet downstream of the meter run or any production facilities. Meter runs will be housed and/or fenced.

The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place prior to any deliveries. Tests for meter accuracy will be conducted monthly for the first three months on new meter installations and at least quarterly thereafter. The AO will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports will be submitted to the Vernal District Office. All meter measurement facilities will conform with Onshore Oil & Gas Order No. 4 for liquid hydrocarbons and Onshore Oil & Gas Order No. 5 for natural gas measurement.

The use of materials under BLM jurisdiction will conform to 43 CFR 3610.2-3.

There will be no deviation from the proposed drilling and/or workover program without prior approval from the AO. Safe drilling and operating practices must be observed. All wells, whether drilling, producing, suspended, or abandoned will be identified in accordance with 43 CFR 3162.

"Sundry Notice and Report on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3162.3-2.

Section 102(b)(3) of the Federal Oil and Gas Royalty Management Act of 1982, as

implemented by the applicable provisions of the operating regulations at Title 43 CFR 3162.4-1(c), requires that "not later than the 5th business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site, or resumes production in the case of a well which has been off production for more than 90 days, the operator shall notify the authorized officer by letter or sundry notice, Form 3160-5, or orally to be followed by a letter or sundry notice, of the date on which such production has begun or resumed."

If you fail to comply with this requirement in the manner and time allowed, you shall be liable for a civil penalty of up to \$10,000 per violation for each day such violation continues, not to exceed a maximum of 20 days. See Section 109(c)(3) of the Federal Oil and Gas Royalty Management Act of 1982 and the implementing regulations at Title 43 CFR 3162.4-1(b)(5)(ii).

APD approval is valid for a period of one (1) year from the signature date. An extension period may be granted, if requested, prior to the expiration of the original approval period.

In the event after-hours approvals are necessary, please contact one of the following individuals:

Ed Forsman (801) 789-7077
Petroleum Engineer

Wayne Bankert (801) 789-4170
Petroleum Engineer

BLM FAX Machine (801) 781-4410

EPA'S LIST OF NONEXEMPT EXPLORATION AND PRODUCTION WASTES

While the following wastes are nonexempt, they are not necessarily hazardous.

- Unused fracturing fluids or acids
- Gas plant cooling tower cleaning wastes
- Painting wastes
- Oil and gas service company wastes, such as empty drums, drum rinsate, vacuum truck rinsate, sandblast media, painting wastes, spend solvents, spilled chemicals, and waste acids
- Vacuum truck and drum rinsate from trucks and drums, transporting or containing nonexempt waste
- Refinery wastes
- Liquid and solid wastes generated by crude oil and tank bottom reclaimers
- Used equipment lubrication oils
- Waste compressor oil, filters, and blowdown
- Used hydraulic fluids
- Waste solvents
- Waste in transportation pipeline-related pits
- Caustic or acid cleaners
- Boiler cleaning wastes
- Boiler refractory bricks
- Incinerator ash
- Laboratory wastes
- Sanitary wastes
- Pesticide wastes
- Radioactive tracer wastes
- Drums, insulation and miscellaneous solids.

SURFACE USE PROGRAM
Conditions of Approval (COAs)

Additional Surface Conditions of Approval

No construction or drilling activities shall be conducted between May 15 and June 20 because of crucial pronghorn habitat identified in the lease stipulations.

A silt catchment dam and basin will be constructed according to BLM specifications approximately 200 ft. northwest of the location, where flagged.

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

PHONE CONVERSATION DOCUMENTATION FORM

This is the original form or a copy

Route this form to:

WELL FILE See Below

SUSPENSE

OTHER

Return date _____

MKH

To: initials _____

Section _____ Township _____ Range _____

API number _____

Date of phone call: 10/16/95

Time: 8:30 AM t

DOGMA employee (name) Don Staley

Initiated call?

Spoke with:

Name SALLY

Initiated call?

of (company/organization) BLM - Vernal

Phone no. 801-781-4400

Topic of conversation: Rescind / Extension of APDs

Highlights of conversation:

According to Sally, Snyder Oil Corp. has requested a one year extension for the following APDs:

Southman Canyon	4-2-L	43-047-32550	4-105-23E
"	" 5-3-H	} - } - 32551	5-105-23E
"	" 8-3-D	} - } - 32552	8-105-23E
"	" 10-2-F	} - } - 32553	10-105-23E
Horse shoe Bend	6-12	} - } - 32578	6-75-22E

12/2/96



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Vernal District Office

170 South 500 East

Vernal, Utah 84078-2799

Phone: (801) 781-4400

Fax: (801) 781-4410

IN REPLY REFER TO:

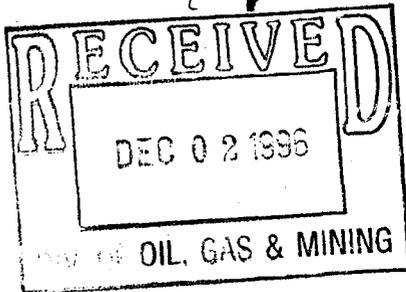
3162

UT08438

November 26, 1996

Snyder Oil Corporation
1625 Broadway, Suite 2200
Denver, CO 80202

*-DOG-M
LA DATE*



Re: Notification of Expiration
Well No. Southman Canyon 8-3-D
Section 8, T10S, R23E *43-047-32552*
Lease No. U-37355
Duchesne County, Utah

Gentlemen:

The Application for Permit to Drill the above-referenced well was approved on October 17, 1994. Snyder Oil Corporation requested an extension of the original APD approval for an additional year. The request was reviewed and the extension approved until October 17, 1996. According to our records, no known activity has transpired at the approved location. In view of the foregoing, this office is notifying you the approval of the referenced application has expired. If you intend to drill at this location at a future date, a new Application for Permit to Drill must be submitted.

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

Sincerely,

Margie Herrmann
Legal Instruments Examiner

cc: State Div. OG&M
Snyder, Vernal Office