

UTAH OIL AND GAS CONSERVATION COMMISSION

REMARKS: WELL LOG \_\_\_\_\_ ELECTRIC LOGS \_\_\_\_\_ FILE **X** WATER SANDS \_\_\_\_\_ LOCATION INSPECTED \_\_\_\_\_ SUB REPORT/abd \_\_\_\_\_

**Application rescinded 4.16.85**

DATE FILED **2-21-84**

LAND: FEE & PATENTED \_\_\_\_\_ STATE LEASE NO. \_\_\_\_\_ PUBLIC LEASE NO. \_\_\_\_\_ INDIAN **14-20-H62-1862**

DRILLING APPROVED: **2-28-84 OIL (CAUSE 140-12)**

SPUDDED IN: \_\_\_\_\_

COMPLETED: \_\_\_\_\_ PUT TO PRODUCING: \_\_\_\_\_

INITIAL PRODUCTION: \_\_\_\_\_

GRAVITY A.P.I. \_\_\_\_\_

GOR: \_\_\_\_\_

PRODUCING ZONES: \_\_\_\_\_

TOTAL DEPTH: \_\_\_\_\_

WELL ELEVATION: \_\_\_\_\_

DATE ABANDONED: **2A 4.16.85**

FIELD: **ALTAMONT 3/86**

UNIT: \_\_\_\_\_

COUNTY: **DUCHESNE**

WELL NO. **SANTIO 2-1B4** API NO **43-013-30909**

LOCATION **1561' FSL** FT. FROM (N) (S) LINE. **2361' FWL** FT. FROM (E) (W) LINE. **NESW** 1/4 - 1/4 SEC. **1**

TWP.	RGE.	SEC.	OPERATOR	TWP.	RGE.	SEC.	OPERATOR
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2S	4W	1	SHELL WESTERN E & P INC.				
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UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK  
 DRILL  DEEPEN  PLUG BACK

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

2. NAME OF OPERATOR  
 Shell Western E&P Inc. et al

3. ADDRESS OF OPERATOR  
 P. O. Box 831, Houston, Tx 77001 Attn. G. M. Jobe Rm 6566 WCK

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
 At surface  
 1561' FSL & 2361' FWL Section 1  
 At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 Approximately 1 1/2 miles south of Altamont, Utah

10. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any)  
 241' - lease  
 1561' - unit

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. UTE 1-1B4  
 3,000'+ from

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 6229' GR

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
SEE ITEM 4 of ATTACHMENT B				

ATTACHMENTS:

- A. SURVEY PLAT
- B. DRILLING PROGRAM
- C. BOP SCHEMATIC
- D. CHOKE MANIFOLD
- E. SURFACE USE PROGRAM
- F. TOPOGRAPHIC MAP
- G. DRILL PAD LAYOUT
- H. DRILL PAD CROSS SECTIONS



IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, 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 D. M. Jobe TITLE Administrator DATE 2/14/84  
Regulatory-Permits

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_  
 APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_  
**APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING**

CONDITIONS OF APPROVAL, IF ANY:  
 CC - BIA - Uintah & Ouray Agency  
 FT. Duchesne, Utah  
 STATE OF UTAH  
 SALT LAKE CITY, UT

DATE: 2/14/84  
 BY: [Signature]

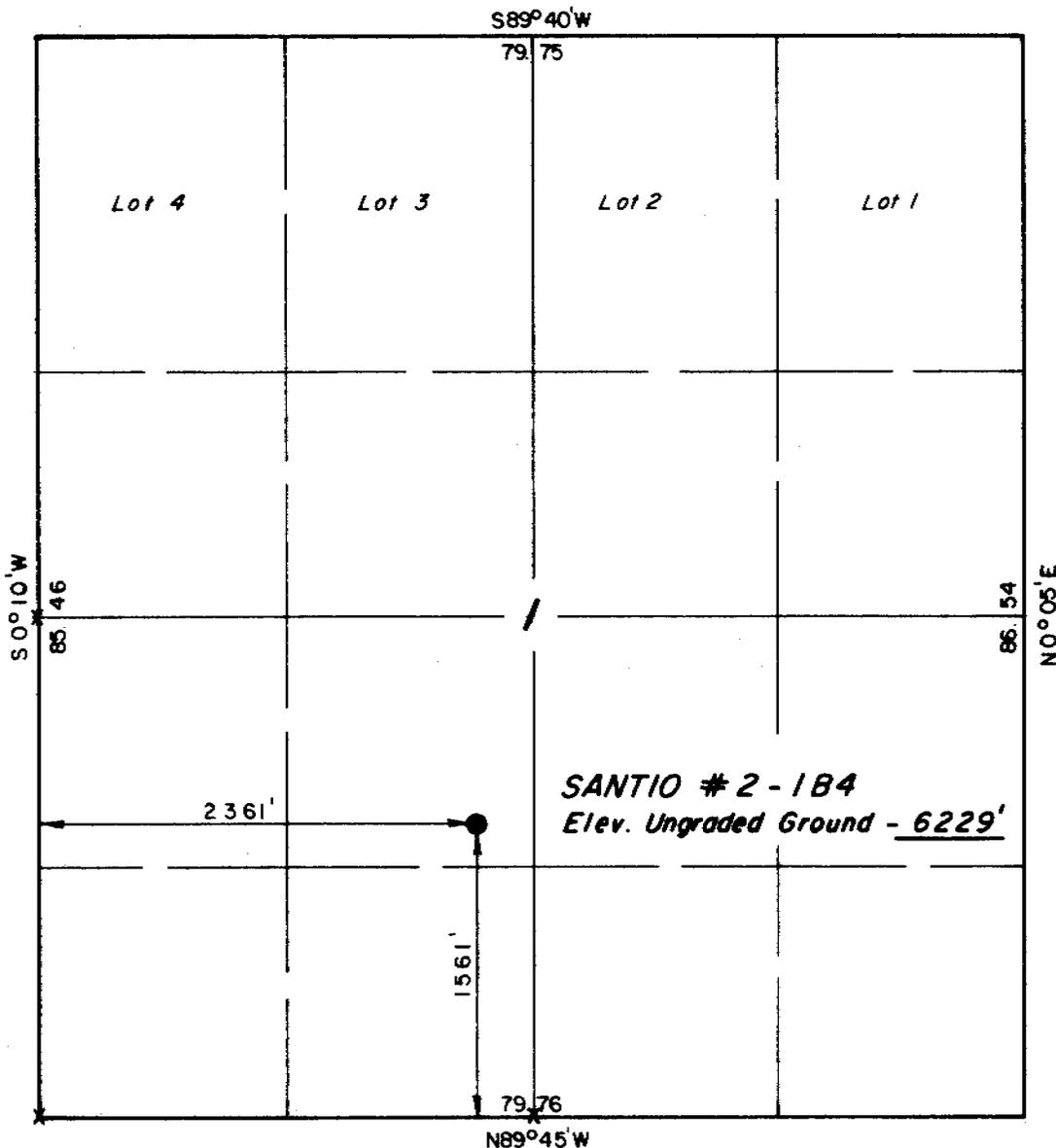
\*See Instructions On Reverse Side

T 2 S , R 4 W , U.S.B. & M.

PROJECT

SHELL WESTERN E. & P. INC.

Well location, *SANTIO #2-1B4*, located as shown in the NE 1/4 SW 1/4 Section 1, T2S, R4W, U.S.B. & M. Duchesne County, Utah.



X = Section Corners Located



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.

*Robert Marshall*

REGISTERED LAND SURVEYOR  
REGISTRATION NO 2454  
STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING  
P. O. BOX Q - 85 SOUTH - 200 EAST  
VERNAL, UTAH - 84078

SCALE	1" = 1000'	DATE	2/13/84
PARTY	DA GS DK RP	REFERENCES	GLO Plat
WEATHER	Fair	FILE	SHELL

Attachment A



RECONCILE WELL NAME AND LOCATION ON APD AGAINST SAME DATA ON PLAT MAP.

AUTHENTICATE LEASE AND OPERATOR INFORMATION

VERIFY ADEQUATE AND PROPER BONDING

AUTHENTICATE IF SITE IS IN A NAMED FIELD, ETC.

APPLY SPACING CONSIDERATION

ORDER 140-12 (8/27/81)

UNIT \_\_\_\_\_

c-3-b

c-3-c

CHECK DISTANCE TO NEAREST WELL.

CHECK OUTSTANDING OR OVERDUE REPORTS FOR OPERATOR'S OTHER WELLS.

IF POTASH DESIGNATED AREA, SPECIAL LANGUAGE ON APPROVAL LETTER

IF IN OIL SHALE DESIGNATED AREA, SPECIAL APPROVAL LANGUAGE.

VERIFY LEGAL AND SUFFICIENT DRILLING WATER

February 28, 1984

Shell Wester E & P Inc. et al  
P. O. Box 831  
Houston, TX 77001

Re: Well No. Santio 2-1B4  
NESW Sec. 1, T. 2S, R. 4W  
1561' FSL, 2361' FWL  
Duchesne County, Utah

Gentlemen:

Approval to drill the above referenced oil well is hereby granted in accordance with Order of Cause No. 140-12 dated August 27, 1981, subject to the following stipulation:

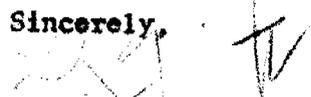
1. Strict compliance with the conditions for drilling and producing test wells as ordered in Cause No. 140-12, specifically, production testing time limitations, bottom hole pressure information submittal and damage liability assumption.

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

1. Spudding notification to the Division within 24 hours after drilling operations commence.
2. Submittal to the Division of completed Form OGC-8-X, Report of Water Encountered During Drilling.
3. Prompt notification to the Division should you determine that it is necessary to plug and abandon this well. Notify R. J. Firth, Chief Petroleum Engineer, Telephone (801) 533-5771 (Office), 571-6068 (Home).
4. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-013-30909.

Sincerely,

  
R. J. Firth  
Chief Petroleum Engineer

RJF/gl  
Enclosures

**Shell Western E&P Inc.**

A Subsidiary of Shell Oil Company



P.O. Box 831  
Houston, TX 77001

February 14, 1984

Mr. Norm Stout  
State of Utah  
Division of Oil, Gas & Mining  
4241 State Office Building  
Salt Lake City, UT 84114

Dear Mr. Stout:

SUBJECT: APPLICATION FOR PERMIT TO DRILL  
SWEPI ET AL SANTIO 2-1B4 (USA-BIA)  
NE/4 SW/4 SECTION 1, T2S-R4W  
ALTAMONT FIELD  
DUCHESNE COUNTY, UTAH

Enclosed is a copy of a federal Application for Permit to Drill, with attachments, for the subject proposed test. The test will be drilled as a "test well" in the Altamont Field as authorized by Order of Cause No. 140-12, effective August 27, 1981. The proposed test is located in the SW/4 of an existing drilling unit developed by the SWEPI et al Ute 1-1B4 (located in the NE/4 Section 1).

As required by Order of Cause No. 140-12, only one well within the 640-acre drilling unit will be produced at any one time following the initial 60-day test period for the subject test well.

As provided in Order of Cause No. 139-5, item B, effective November 17, 1971, we hereby request an exception to the spacing requirements for the Altamont Field due to topographical considerations. The test has been staked in accordance with a request from the BLM and BIA to avoid an irrigation canal and to lessen the impact to an irrigated pasture.

✓ A copy of approval from the Utah Division of Water Rights for use of water for drilling operations will be submitted to your office subsequent to our selection of a water hauler.

Mr. Norm Stout

2

Please inform me at (713) 870-3216 if additional information is required to support approval of the enclosed application.

Yours very truly,

*G. M. Jobe*

G. M. Jobe  
Administrator, Regulatory-Permits  
Rocky Mountain Division

RLT:beb

Enclosures

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

5. LEASE DESIGNATION AND SERIAL NO.  
14-20-H62-1862

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
Allottee-Santio

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
Santio

9. WELL NO.  
2-1B4

10. FIELD AND POOL, OR WILDCAT  
Altamont

11. SEC., T., R., M., OR B.L.K. AND SURVEY OR AREA  
NE/4 SW/4 Section 1  
T2S-R4W

12. COUNTY OR PARISH  
Duchesne

13. STATE  
Utah

**APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK**

1a. TYPE OF WORK  
DRILL  DEEPEN  PLUG BACK

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

2. NAME OF OPERATOR  
Shell Western E&P Inc. et al

3. ADDRESS OF OPERATOR  
P. O. Box 831, Houston, Tx 77001 Attn. G. M. Jobe Rm 6566 WCK

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
At surface  
1561' FSL & 2361' FWL Section 1  
At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
Approximately 1 1/2 miles south of Altamont, Utah

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any)  
241' - lease  
1561' - unit

16. NO. OF ACRES IN LEASE  
40

17. NO. OF ACRES ASSIGNED TO THIS WELL  
640 Pooled

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.  
3,000'+ from UTE 1-1B4

19. PROPOSED DEPTH  
14,300'+

20. ROTARY OR CABLE TOOLS  
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
6229' GR

22. APPROX. DATE WORK WILL START\*  
Upon permit approval

43-013-30909

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
SEE ITEM 4 of ATTACHMENT B				

ATTACHMENTS:

- A. SURVEY PLAT
- B. DRILLING PROGRAM
- C. BOP SCHEMATIC
- D. CHOKE MANIFOLD
- E. SURFACE USE PROGRAM
- F. TOPOGRAPHIC MAP
- G. DRILL PAD LAYOUT
- H. DRILL PAD CROSS SECTIONS

RECEIVED  
MAR 12 1984

DIVISION OF  
OIL, GAS & MINING



IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, 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 G. M. Jobe TITLE Administrator Regulatory-Permits DATE 2/14/84

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY [Signature] TITLE DISTRICT MANAGER DATE 3/7/84

CONDITIONS OF APPROVAL, IF ANY:

CC - BIA - UINTAH & QUAY AGENCY  
STATE OF UTAH

NOTICE OF APPROVAL

TO OPERATOR'S COPY  
\*See Instructions On Reverse Side

FLARING OR VENTING OF GAS IS SUBJECT TO NTL 4-A DATED 1/1/80

UT-080-4-M-118  
State Oil & Gas

SALT LAKE CITY, UT

CONDITIONS OF APPROVAL

The Vernal District Petroleum Engineers have reviewed the Application for Permit to Drill for technical adequacy and concur with the down hole portion of the request providing the following stipulations are included as a part of the approval:

1. Prior to drilling out the casing string shoes, the Ram Type Preventer will be tested to 70% of the internal yeild pressure of the casing or the rated working pressure of the stack, whichever is less. The Bag-type Preventer will be tested to 50% of its working pressure. The entire stack configuration will conform to API RP-53 standards.
2. Prior to running casing strings and testing BOP equipment, please notify the BLM Vernal District Office during working hours enabling a BLM representative to be present.

**Shell Western E&P Inc.**

A Subsidiary of Shell Oil Company



P.O. Box 831  
Houston, TX 77001

February 14, 1984

Mr. Don Alvord  
Asst. District Manager for Minerals  
Bureau of Land Management  
P. O. Box F  
Vernal, UT 84078

Dear Mr. Alvord:

SUBJECT: APPLICATION FOR PERMIT TO DRILL  
SWEPI ET AL SANTI0 2-1B4 (USA-BIA)  
NE/4 SW/4 SECTION 1, T2S-R4W  
ALTAMONT FIELD  
DUCHESNE COUNTY, UTAH

Enclosed is an A.P.D. for the subject proposed test. The test will be drilled as a second well in an existing 640± acre drilling unit consisting of Section 1 (see enclosed copy of letter to the State of Utah).

The test site is on <sup>✓</sup>allotted Indian land administered by the Bureau of Indian Affairs. The surface allottee also owns the mineral rights.

An on-site inspection of the proposed test site was held on February 10, 1984 with representatives of the BLM and BIA. The proposed drill site was moved 277 feet east, as requested, to place the drill pad in the southeast corner of the 40-acre tract, thereby lessening the impact to an irrigated pasture. It is anticipated that preparation of the access road and drill pad will require approximately three weeks. The access road and drill site construction will be competitively bid, the contract awarded to a competent dirt contractor and all efforts supervised by SWEPI personnel.

It is our desire to begin drilling this test in early March following completion of drilling operations on the Brotherson 2-2B4 located one mile to the west. Therefore, your assistance in expediting permit approval will be appreciated.

As discussed and agreed with Mr. Allen Core, Superintendent, Bureau of Indian Affairs, Uintah and Ouray Indian Agency, fill material will be placed over the ground surface of the new access road and drill pad area after the snow has carefully been removed. This preparation procedure will protect any potential cultural resources and, therefore, the need for a cultural resource survey has been waived.

Mr. Don Alvord

2

Please inform me at (713) 870-3216 if additional information is required to support approval of the enclosed application.

Yours very truly,

*G. M. Jobe*

G. M. Jobe  
Administrator, Regulatory-Permits  
Rocky Mountain Division

RLT:beb

Enclosures

SWEPI et al Santio 2-1B4  
NE/4 SW/4 Section 1  
T2S-R4W  
Duchesne County, Utah

DRILLING PROGRAM  
Onshore Oil & Gas Order No. 1

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations, Onshore Oil and Gas Order No. 1, 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.

1. Estimated Tops of Important Geological Markers

Duchesne River	Surface
Basal Green River	9530'
✓ Wasatch	10,960'
Flagstaff	12,360'
North Horn	14,330'
Total Depth	14,380'

2. Estimated Depths of Anticipated Water, Oil, Gas & Minerals

Duchesne River	100' - 1,000'	- Fresh water
Duchesne River/Uinta	2,000' - 6,000'	- Brine water
Wasatch/Flagstaff	10,960' - 14,380'	- Oil

All fresh water and prospectively valuable minerals encountered during drilling will be recorded by depth, cased and cemented. All oil and gas shows will be tested to determine commercial potential.

3. Minimum Pressure Control Equipment

Attachment C is a schematic diagram of the minimum blowout preventer equipment to be used. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout preventer controls will be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. Preventers will be pressure tested before drilling casing cement plugs. Accessories to the BOP include a Kelly cock, floor safety valve, drill string BOP and choke manifold with pressure rating equivalent to the BOP stack. Attachment D is a schematic diagram of the minimum choke manifold to be used.

4. Proposed Casing and Cementing Program

a. Conductor Pipe: Cemented at 50' with redimix.

b. Surface Casing:

New 13-3/8" 48# H40 STC @ 300'. Cement to surface with approximately 370 sx Class "H" with 3% CaCl<sub>2</sub> and 1/4#/sx Flocele.

New 9-5/8" 36# K-55 LTC @ 4000' cement to 3000' with 150 sx light + 6% gel + 1/4#/sx Flocele followed by 200 sx Class "H" + 1/4#/sx Flocele. Bullhead 325 sx of light cement + 3% CaCl<sub>2</sub> into 9-5/8" and 13-3/8" annulus.

c. Production Casing:

New 7" casing at 10,900' (26# and 29# S-95 LT&C). Two stage cement job. Cement First stage w/160 Lite + 6% gel + 1% Halad 9 + 1/4#/sx Flocele and 150 sx Class "H" + 1% Halad 9 + 0.1% HR-4 + 1/4#/sx Flocele. Cement second stage with 250 sx Lite + 6% gel + .6% Halad 24, + 3% CaCl<sub>2</sub>. Cement to 6000'.

5" Liner 18# N-80 and P-110 SFJP at 14,380'. Cement to liner top.

5. Proposed Circulating Medium

a. Fresh water native mud from surface to 9800'.  
Mud weight 8.5 - 8.8 ppg.

b. Low Lime mud from 9800' to total depth. Weight as required (approximately 11-15 ppg).

c. No chromate additives will be used in the mud system on Federal and Indian lands to ensure adequate fresh water aquifer protection.

6. Proposed Coring, Testing and Logging Program

a. Coring: None.

b. Testing: No DSTs.

c. Electric Logs: DIL/SFL/SP/GR/CAL	0 - 4000'
DIL/SFL/SP/GR/CAL	4000' - 10,900'
LDT/CNL/GR/CAL	
BHC Sonic/ITT/GR/CAL	
DIL/SFL/SP/GR/CAL	10,900' to 14,380' TD
LDT/CNL/GR/CAL	
BHC Sonic/ITT/GR/CAL	

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 15 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 authorized officer (AO).

7. Expected Bottom Hole Pressure and Potential Hazards

- a. Expected BHP: 10,000 psi at TD (max .7 psi/ft).
- b. Anticipated Abnormal Pressures or Temperatures: None.
- c. Hydrogen Sulfide Potential: None.

8. Anticipated Starting Dates and Notification of Operations

- a. Location construction: Upon permit approval. Spud date: Following completion of drill site, approx. March 12, 1984. ✓
- b. 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.
- c. The spud date will be reported orally to the AO within 48 hours after spudding. If the spudding occurs on a weekend or holiday, the report will be submitted the following regular work day.
- d. In accordance with Onshore Oil and Gas Order No. 1, this well will be reported on Form 9-329 "Monthly Report of Operations," starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report will be filed, in duplicate, directly with Royalty Management Accounting Center, Minerals Management Service, P. O. Box 2859, Casper, Wyoming 82602, and a copy forwarded to the Vernal BLM District Office, 170 South 500 East, Vernal, Utah 84078.
- e. 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.

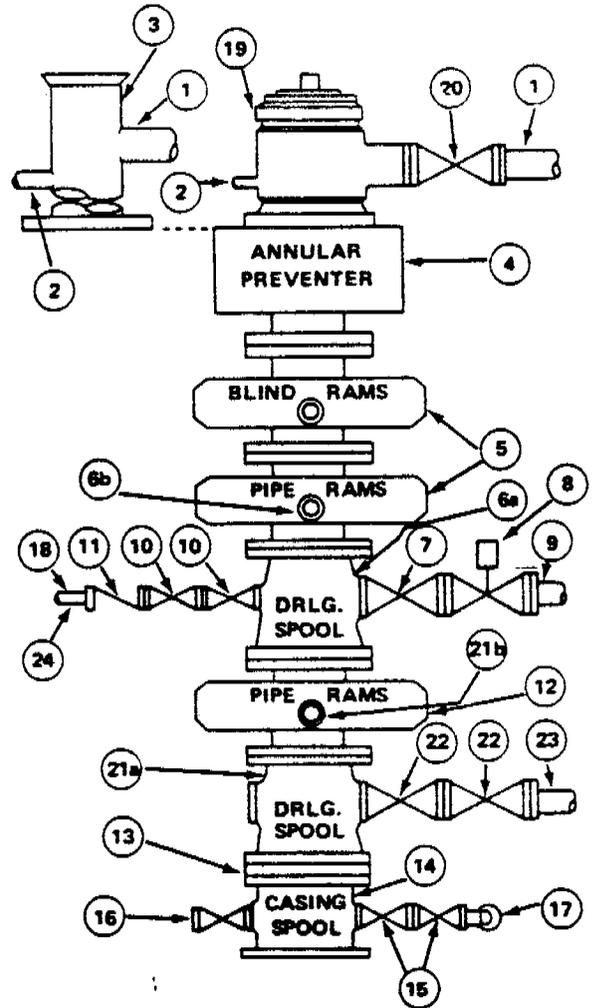
- f. Should the well be successfully completed for production, the AO will be notified when the well is placed in a producing status. Such notification will be sent by telegram or other written communication, not later than the first business day following the date on which the well is placed on production.
- g. 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 SO. A "Subsequent Report of Abandonment" (Form 3160-5) will be filed with the AO within 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.
- h. A first production conference will be scheduled within 15 days after receipt of the first production notice.



SHELL OIL COMPANY

**DRAWING AND CHECK LIST 105**  
**SHELL CLASS 5MR, 5MS, 5MA**  
**5,000 psi Working Pressure**

SHELL MINIMUM BOP STACK REQUIREMENTS			
No.	Item	Min. I.D.	Min. Nominal
1	Flowline		
2	Fill up Line		2"
3	Drilling Nipple		
4	Annular Preventer		
5	Two single or one dual hydraulically operated rams		
6a	Drilling spool with 2" and 3" min. outlets		
6b	Use ram outlets as alternate to 6a		
7	Valve Gate <input checked="" type="checkbox"/> Plug <input checked="" type="checkbox"/>	3-1/8"	
8	Gate Valve Power Operated	3-1/8"	
9	Line to choke manifold		3"
10	Valves Gate <input checked="" type="checkbox"/> Plug <input checked="" type="checkbox"/>	2-1/16"	
11	Check Valve	2-1/16"	
12	Single hydraulically operated ram		
13	Wear flange or bushing		
14	Casing spool		
15	Valves Gate <input checked="" type="checkbox"/> Plug <input checked="" type="checkbox"/>	1-13/16"	
16	Flanged control plug or valve	1-13/16"	
17	Compound pressure gauge		
18	Kill line to rig mud pump manifold		2"



NOTE: Additional specifications for Sour Service and Air-Gas Drilling are given in Shell Well Control Manual, Appendix 5.20 and Appendix 5.21.

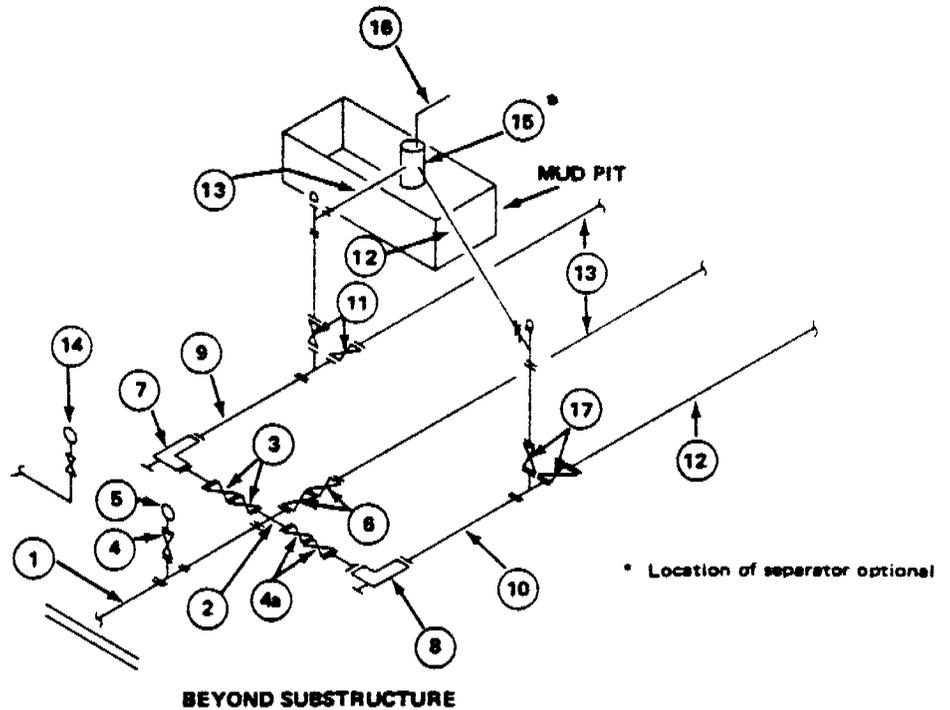
OPTIONAL			
19	Rotating Blowout Preventer*		
20	Power Operated gate valve	6"	
21a	Drilling spool with 3" outlet		
21b	3" outlet in ram preventer		
22	Valves Gate <input checked="" type="checkbox"/> Plug <input checked="" type="checkbox"/>	3 1/8"	
23	Auxiliary choke line		3"
24	Roadside connection to kill line		2"
	Shear ram blocks for blind rams		

\* 3,000 psi rating



SHELL OIL  
COMPANY

MINIMUM CHOKE MANIFOLD  
DRAWING NO. 202A  
SHELL CLASS 3M, 5M AND 10M  
3,000, 5,000 and 10,000 psi Working Pressure



SHELL MINIMUM REQUIREMENTS										
No.		Class 3M			Class 5M			Class 10M		
		I.D.	NOMINAL	RATING	I.D.	NOMINAL	RATING	I.D.	NOMINAL	RATING
1	Line from drilling spool		3"	3,000		3"	5,000		3"	10,000
2	Cross 3"x3"x3"x2"			3,000			5,000			
	Cross 3"x3"x3"x3"									10,000
3	Valves (1) Gate <input checked="" type="checkbox"/> Plug <input checked="" type="checkbox"/> (2)	3 1/8"		3,000	3 1/8"		5,000	3 1/8"		10,000
4	Valve Gate <input checked="" type="checkbox"/> Plug <input checked="" type="checkbox"/> (2)	1 13/16"		3,000	1 13/16"		5,000	1 13/16"		10,000
4a	Valves (1)	2 1/16"		3,000	2 1/16"		5,000	3 1/8"		10,000
5	Pressure Gauge			3,000			5,000			10,000
6	Valves Gate <input checked="" type="checkbox"/> Plug <input checked="" type="checkbox"/> (2)	3 1/8"		3,000	3 1/8"		5,000	3 1/8"		10,000
7	Adjustable Choke (3)	2"		3,000	2"		5,000	2"		10,000
8	Adjustable Choke	1"		3,000	1"		5,000	2"		10,000
9	Line		3"	3,000		3"	5,000		3"	10,000
10	Line		2"	3,000		2"	5,000		3"	10,000
11	Valves Gate <input checked="" type="checkbox"/> Plug <input checked="" type="checkbox"/> (2)	3 1/8"		3,000	3 1/8"		5,000	3 1/8"		10,000
12	Lines		2"	1,000		2"	1,000		3"	2,000
13	Lines		3"	1,000		3"	1,000		3"	2,000
14	Remote reading compound standpipe pressure gauge			3,000			5,000			10,000
15	Gas Separator		2'x5'			2'x5'			2'x5'	
16	Line		4"	1,000		4"	1,000		4"	2,000
17	Valves Gate <input checked="" type="checkbox"/> Plug <input checked="" type="checkbox"/> (2)	2 1/16"		3,000	2 1/16"		5,000	3 1/8"		10,000

(1) Only one required in Class 3M.  
 (2) Gate valves only shall be used for Class 10M.  
 (3) Remote operated hydraulic choke required on Class 10M for drilling.

SWEPI ET AL SANTIO 2-1B4  
NE/4 SW/4 Section 1, T2S-R4W  
Duchesne County, Utah

SURFACE USE PROGRAM  
Onshore Oil & Gas Order No. 1

1. Existing Roads

- a. The access to the location is illustrated on Attachment F.
- b. The existing road will be widened to approximately 30 feet to allow safe access and the surface will be graveled. At least two 18-inch culverts will be placed as needed along this road.

2. New Roads to be Constructed

A 48-inch culvert will be placed in the irrigation drain on the west side of the existing road to provide access to the drill site. A short access road about 100 feet in length and approximately 30 feet wide will be constructed directly from the existing road onto the drill pad. The grade will be approximately 5 percent. All travel will be confined to existing access roads.

3. Existing Wells

Existing wells within a one-mile radius are illustrated on Attachment F.

4. Existing and/or Proposed Production Facilities

- a. On well pad - Flowline only.
- b. Off well pad - Produced fluids from the Santio 2-1B4 will be moved by flowline to the SWEPI Brotherson 1-2B4 location for separation through existing production facilities of the Ute 1-1B4. The location of the proposed flowline is illustrated on Attachment F.
- c. All permanent (on site for six months or longer) structures constructed or installed (including oil well pumpjacks) will be painted a flat, non-reflective, earthtone color to match the standard environmental colors, as determined by the Rocky Mountain 5 State Interagency Committee. All facilities will be painted within six months of installation. Facilities required to comply with OSHA (Occupational Safety and Health Act) will be excluded.
- d. If a tank battery is constructed on this lease, it will be surrounded by a dike of sufficient capacity to contain  $1\frac{1}{2}$  times the storage capacity of the battery. All loading lines will be placed inside the berm surrounding the tank battery.

- e. All site security guidelines identified in 43 CFR 3162.7 regulations will be adhered to.
- f. All off-lease storage, off-lease measurement or commingling on-lease or off-lease will have prior written approval from the Authorizing Officer (AO).
- g. Gas meter runs for each well will be located within 500 feet of the separation vessel. Meter runs will be housed and/or fenced.
- h. The oil and gas measurement facilities are installed at the Brotherson 1-2B4 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 the API standards for liquid hydrocarbons and the AGA standard for natural gas measurement.

5. Location and Type of Water Supply for Drilling

- ✓ Water to be used for drilling will be obtained from a private source nearby and trucked to the location. A copy of approval from the Utah Division of Water Rights for use of water for drilling operations will be submitted to the BLM and to the State of Utah, Division of Oil, Gas and Mining subsequent to our selection of water hauler. Information for the water permit will include: (a) the approximate amount of water needed, (b) location and ownership of the water rights to be used, and (c) the approximate amount of time the water will be required.

6. Construction Materials

Fill material with gravel surfacing will be necessary for construction of the new access road and entire drill pad area. This construction material will be acquired from private sources by our dirt contractor and hauled by truck to the site. Proper permits will be obtained.

7. Waste Disposal Methods

- a. Drill cuttings will be buried in the reserve pit.
- b. Garbage and other waste material will be kept in an enclosed trash cage and removed to a sanitary land fill.

- c. Sewage will be handled by septic tank facilities.
- d. The reserve pit will be lined with a plastic liner of 40 mil or greater thickness. Prior to installing the liner, the pit surface will be lined with sand or other fine material to prevent puncturing the plastic liner.
- e. Drilling fluids will be allowed to evaporate in the reserve pit or removed by vacuum truck. The pit will be kept fenced during and after drilling until the pit is dry. Fencing will be a wire mesh fence topped with at least one strand of barbed wire.
- f. Any produced oil and water will be collected in a test tank for eventual disposition.
- g. Any oil on the pits when drilling is completed will be removed.
- h. Produced waste water will be moved by flowline with other fluids to separation facilities at the SWEPI Brotherson 1-2B4 in the NE/4 Section 2, T2S-R4W. Within 90 days after initial production of water, an application for approval of a permanent disposal method and location, along with required water analysis, will be submitted for the AO's approval. Failure to file an application within the time allowed will be considered an incident of non-compliance, and will be grounds for issuing a shut-in order.

8. Ancillary Facilities

None required.

9. Well Site Layout

- a. Attachment G is the Drill Pad Layout illustrating the location of drilling equipment, trailers, pits, etc. The topsoil will be undisturbed except in the area of the reserve pit.
- b. Attachment H illustrates cross-section diagrams of the drill pad.

10. Plans for Surface Reclamation

- a. Immediately after the rig moves out, the location will be cleaned up and all waste materials will be hauled away to a sanitary land fill.

- b. The reserve pit will be filled after all trash has been removed and it has dried. Fill material from the unneeded portion of the pad will be removed from over the undisturbed topsoil to allow this area to be returned to use as pasture land.
- c. Revegetation will be according to BIA specifications.
- d. The reserve pit and that portion of the drill pad not needed for production operations will be reclaimed within 90 days after completion of the well, weather conditions permitting.
- e. Abandoned well sites, roads, or other disturbed areas will be restored to near their original condition. This procedure will include: (a) re-establishing irrigation systems where applicable, (b) re-establishing soil conditions in irrigated fields in such a way as to insure cultivation and harvesting of crops, and (c) insuring revegetation of the disturbed areas to the specifications of the Ute Indian Tribe or the BIA at the time of abandonment.
- f. The operator will submit a plan of controlling noxious weeds along rights-of-way for roads, pipelines, well sites or other applicable facilities. A list of noxious weeds can be obtained from the appropriate county extension office.

#### 11. Surface Ownership

The existing roads are located on private lands. Surface ownership at the drill site and eastward to the existing road is allotted Indian land administered by the BIA. The minerals are owned by the same Indian allottee.

#### 12. Other Information

- a. A cultural resource survey of the drill site and new 100' access road has been waived by the BIA inasmuch as the surface will be undisturbed by the proposed construction method. Fill material will be placed over the entire drill pad area and short access road. All of the minerals and working interest ownership in Section 1 have been pooled (communitized) to form a 640-acre drilling and producing unit for the SWEPI Ute 1-1B4. The Santio 2-1B4 will be drilled as a "test well" within the existing producing unit. (See attached copy of letter to the State of Utah.)

- b. 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 3162.2.
- c. "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 3154.
- d. The dirt contractor will be provided with an approved copy of the surface use plan.
- e. A cultural resource clearance will not be required before any construction begins. If any cultural resources are found during construction, all work will stop and the appropriate BLM and BIA personnel will be notified.
- f. This permit will be valid for a period of one year from the date of approval. After permit termination, a new application will be filed for approval for any future operations.

13. Lessee's or Operator's Representative & Certification

- a. Operator employees, including subcontractors, will not carry firearms or other weapons that may be used to kill game animals.
- b. Operator employees, including subcontractors, will be confined to established roads and well sites. The purpose of this is to prevent soil erosion, and to prevent harrassment of game animals or livestock with off-road vehicles such as snowmobiles, motorcycles, 4-wheel drives, etc.
- c. All roads constructed by operators on the Uintah and Ouray Indian Reservation will have appropriate signs. Signs will be neat and of sound construction. They will state: (a) that the land is owned by the Ute Indian Tribe, (b) the name of the operator, (c) that firearms are prohibited to all non-Ute Tribal members, (d) that permits must be obtained from the BIA before cutting firewood or other timber products, and (e) only authorized personnel permitted.
- d. A bench mark will be established near each well site in a location where it will not be destroyed. The bench mark will be set in concrete with a brass cap. The brass cap will show the well number and elevation to the nearest one-tenth of a foot. The cross sections for the well site will also show elevations in relation to the bench mark.

e. Representatives:

J. J. Smith  
Shell Western E&P Inc.  
Rocky Mountain Division  
P. O. Box 831  
Houston, TX 77001  
Tel: (713) 870-2714

G. M. Jobe  
Shell Western E&P Inc.  
Rocky Mountain Division  
P. O. Box 831  
Houston, TX 77001  
Tel: (713) 870-3216

f. Certification:

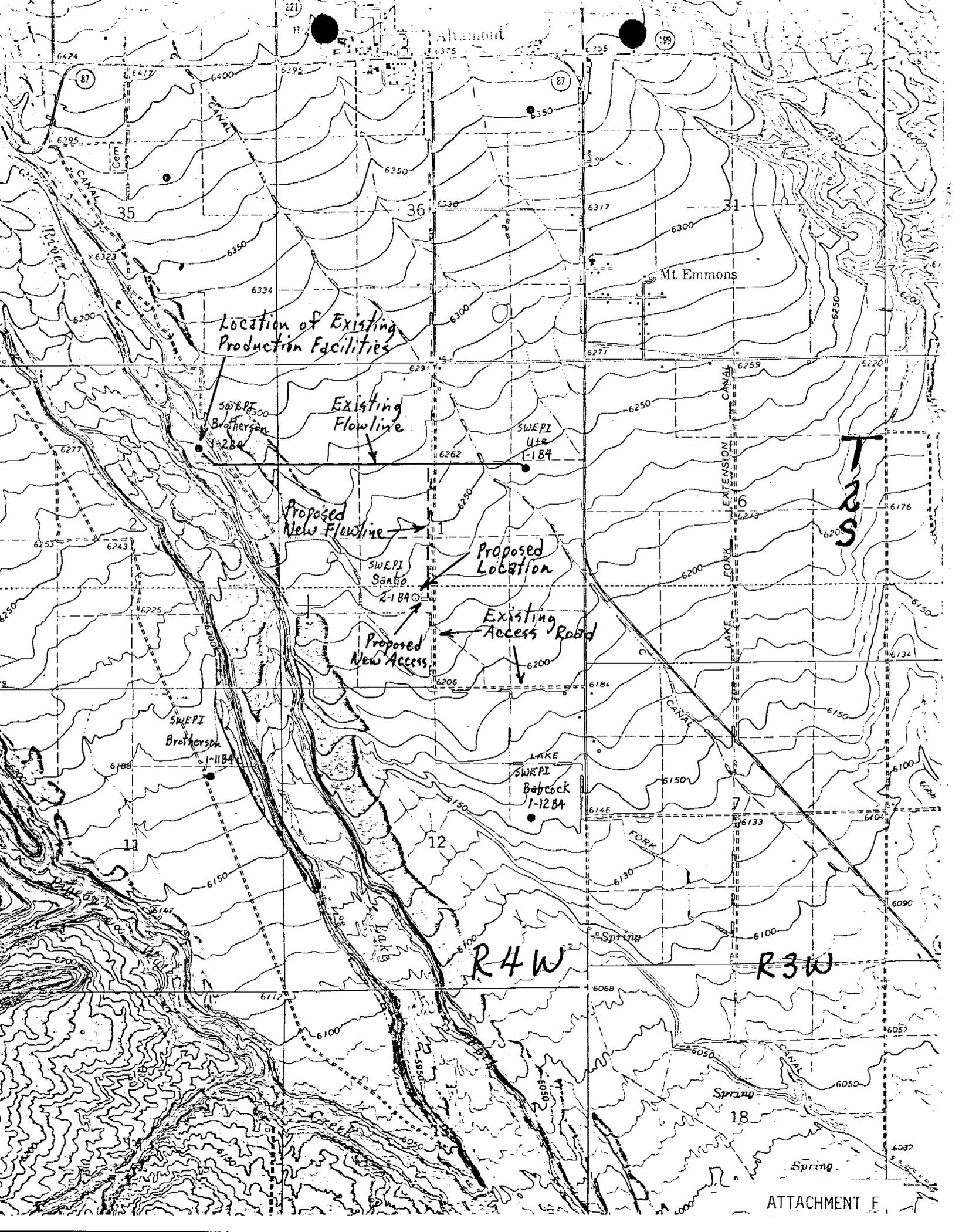
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Shell Western E&P Inc. and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

2-15-84

Date

G. M. Jobe

G. M. Jobe  
Administrator, Regulatory-Permits



Altamont

199

Location of Existing Production Facilities

Existing Flowline

Proposed New Flowline

Proposed Location

Existing Access Road

Proposed New Access

R4W

R3W

T25S

ATTACHMENT F

Mt Emmons

LAKE SWEPI Babcock 1-12 BA

SWEPI Brotherston 1-11 BA

SWEPI Ute 1-1 BA

SWEPI Brotherston 2 BA

SWEPI Santo 2-1 BA

Spring

Spring

Spring

87

87

35

36

31

11

12

7

18

6424

6417

6400

6392

6375

6355

6395

6350

6350

6334

6330

6317

6300

6200

6277

6250

6291

6262

6250

6259

6220

6253

6243

6225

6230

6200

6176

6200

6150

6134

6188

6150

6150

6146

6130

6100

6104

6090

6147

6150

6100

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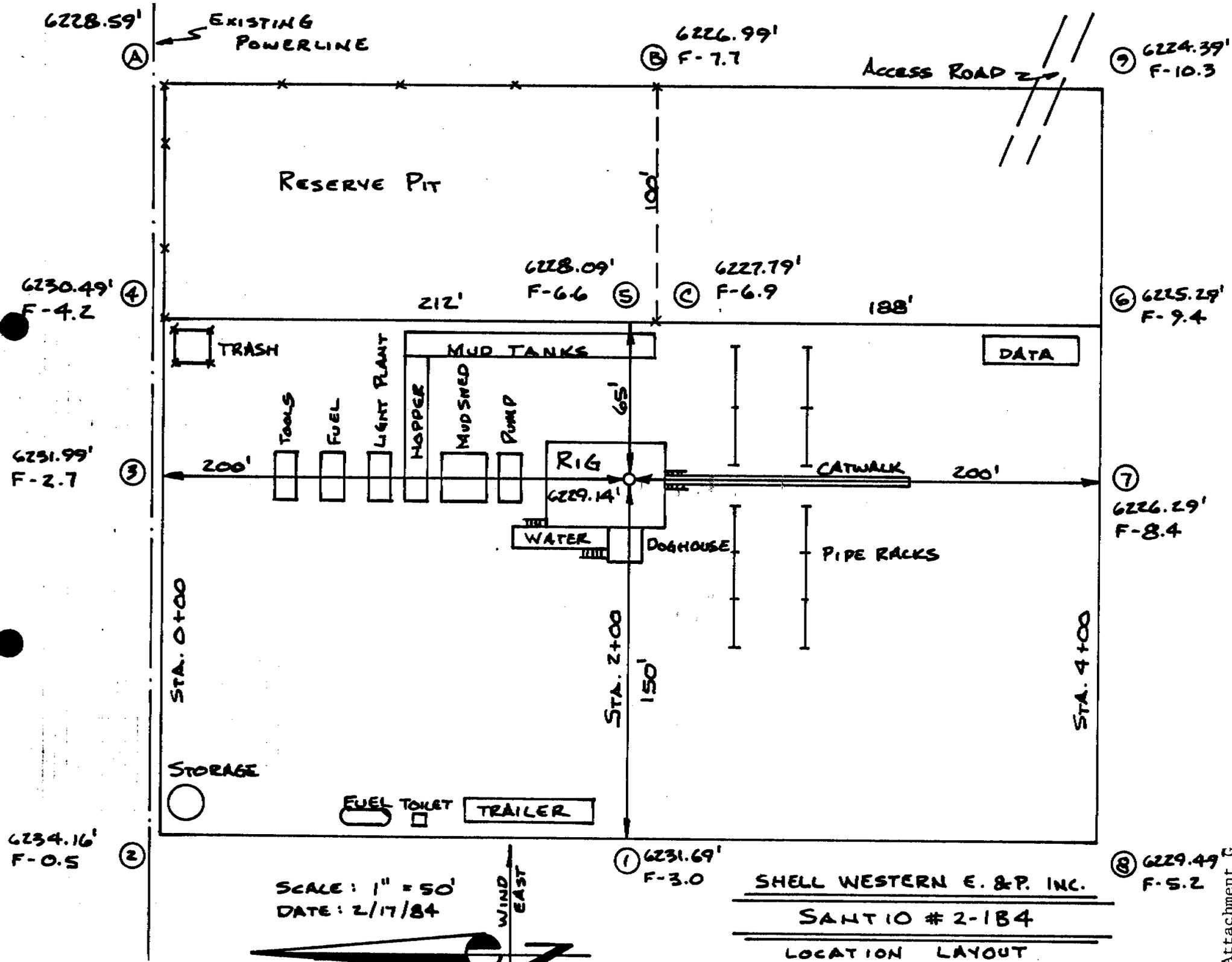
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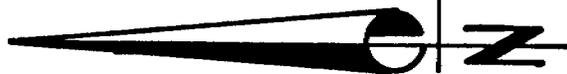
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SCALE: 1" = 50'  
DATE: 2/17/84



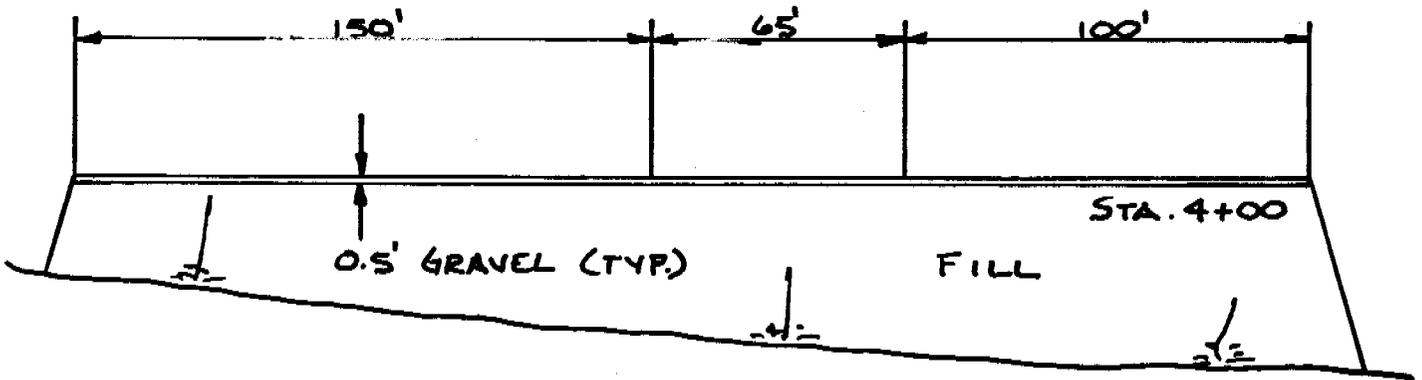
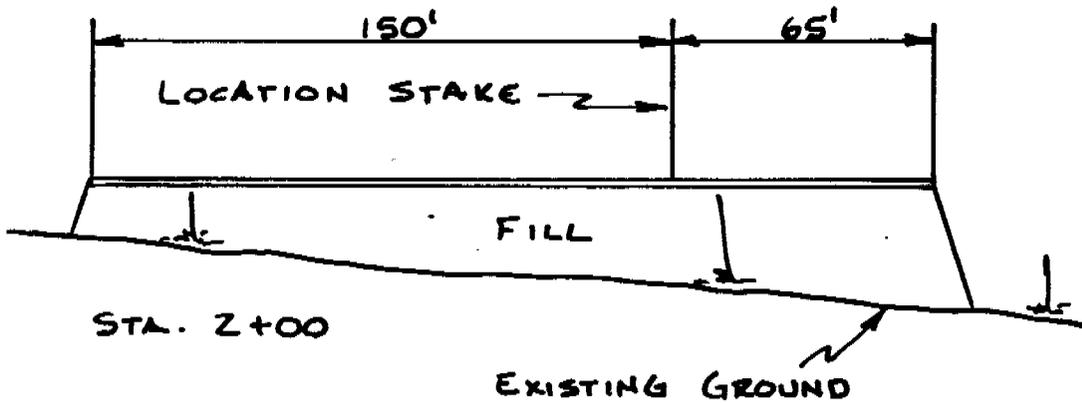
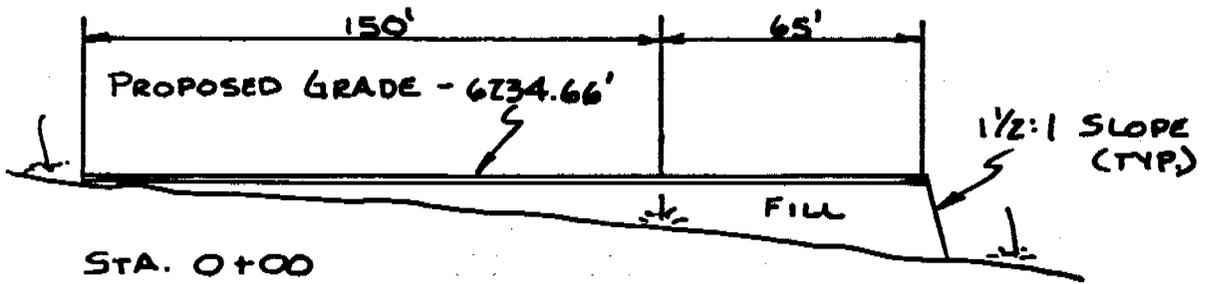
SHELL WESTERN E. & P. INC.

SANTIO #2-1B4

LOCATION LAYOUT

Attachment C

CROSS SECTIONS



SHELL WESTERN E. & P. INC.

SANTIO # 2-1 B 4

APPROX. YARDAGES

CUBIC YDS. CUT - 0

CUBIC YDS. FILL - 23,400

2/17/84

SCALES

1" = 50'

1" = 10'



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

Norman H. Bangerter, Governor  
Dee C. Hansen, Executive Director  
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

April 1, 1985

Bureau of Land Management  
Vernal District Office  
170 South 500 East  
Vernal, Utah 84078

Gentlemen:

Re: Well No. Santio 2-1B4 - Sec. 1, T. 2S., R. 1W.,  
Duchesne County, Utah - Lease No. 14-20-H62-1862  
Operator of Record: Shell Western E & P, Inc.

The above referred to well in your district was given federal approval to drill March 17, 1984. This office has not received notification of any activity on this location.

Please let me know what action, if any, the Bureau of Land Management is taking on this well.

Thank you for your help in keeping our records up to date.

Sincerely,

A handwritten signature in cursive script that reads "Pam Kenna".

Pam Kenna  
Well Records Specialist

cc: Dianne R. Nielson  
Ronald J. Firth  
John R. Baza  
File

0161S/62

**Bureau of Land Management  
Vernal District Office  
170 South 500 East  
Vernal, Utah 84078**

3100  
O&G

April 16, 1985

Shell Western E&P Inc. et al  
Attn: G. M. Jobe, Rm 6566 WCK  
P. O. Box 831  
Houston, TX 77001

RE: Rescind Application for Permit to Drill  
Well No. 2-1B4  
Section 1, T2S, R4W  
Duchesne County, Utah  
Lease No. 14-20-H62-1862

Gentlemen:

The Application for Permit to Drill the referenced well was approved on March 7, 1984. Since that date, no known activity has transpired at the approved location. Under current District policy, Applications for Permit to Drill are effective for a period of one year. In view of the foregoing, this office is rescinding the approval of the referenced application without prejudice. 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,

Craig M. Hansen  
ADM for Minerals

bcc: State Div. O G & M  
well file  
BIA



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

Norman H. Bangerter, Governor  
Dee C. Hansen, Executive Director  
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

April 26, 1985

Shell Western E & P, Inc.  
PO Box 831  
Houston Texas 77001

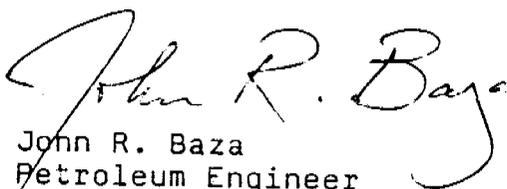
Gentlemen:

Re: Well No. Santio 2-1B4 - Sec. 1, T. 2S., R. 4W.,  
Duchesne County, Utah - API #43-013-30909

In concert with action taken by the Bureau of Land Management, April 16, 1985, approval to drill the above referenced well is hereby rescinded.

A new "Application for Permit to Drill" must be filed with this office, for approval, prior to future drilling of the subject location.

Sincerely,

  
John R. Baza  
Petroleum Engineer

clj

cc: Dianne R. Nielson  
Ronald J. Firth  
File

0170S/75

UTEX OIL COMPANY

SUITE 600  
1245 EAST BRICKYARD ROAD  
SALT LAKE CITY, UTAH 84106

PHONE (801) 484-2262

RECEIVED

January 15, 1986

JAN 16 1986

DIVISION OF OIL  
GAS & MINING

Mr. Ronald J. Firth  
State of Utah Natural Resources  
Oil, Gas and Mining Division  
Suite 350  
355 West North Temple  
3 Triad Center  
Salt Lake City, UT 84180-1203

RE: Brotherson 2-1B4 Well  
2088' FWL, 1553' FSL  
NE $\frac{1}{4}$ SW $\frac{1}{4}$  Sec. 1-T2S-R4W, USM  
Duchesne County, Utah

Dear Mr. Firth:

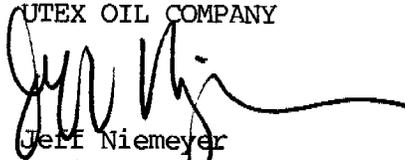
Enclosed is a copy of our plat outlining the referenced well which Utex Oil Company intends to drill and complete as a 14,000 foot Wasatch formation test.

Please adjust your records to show our intent to drill the referenced well rather than the Santio 2-1B4 well which you had previously approved on November 21, 1985.

Should you need any additional information or material, please feel free to call me at anytime.

Very truly yours,

UTEX OIL COMPANY



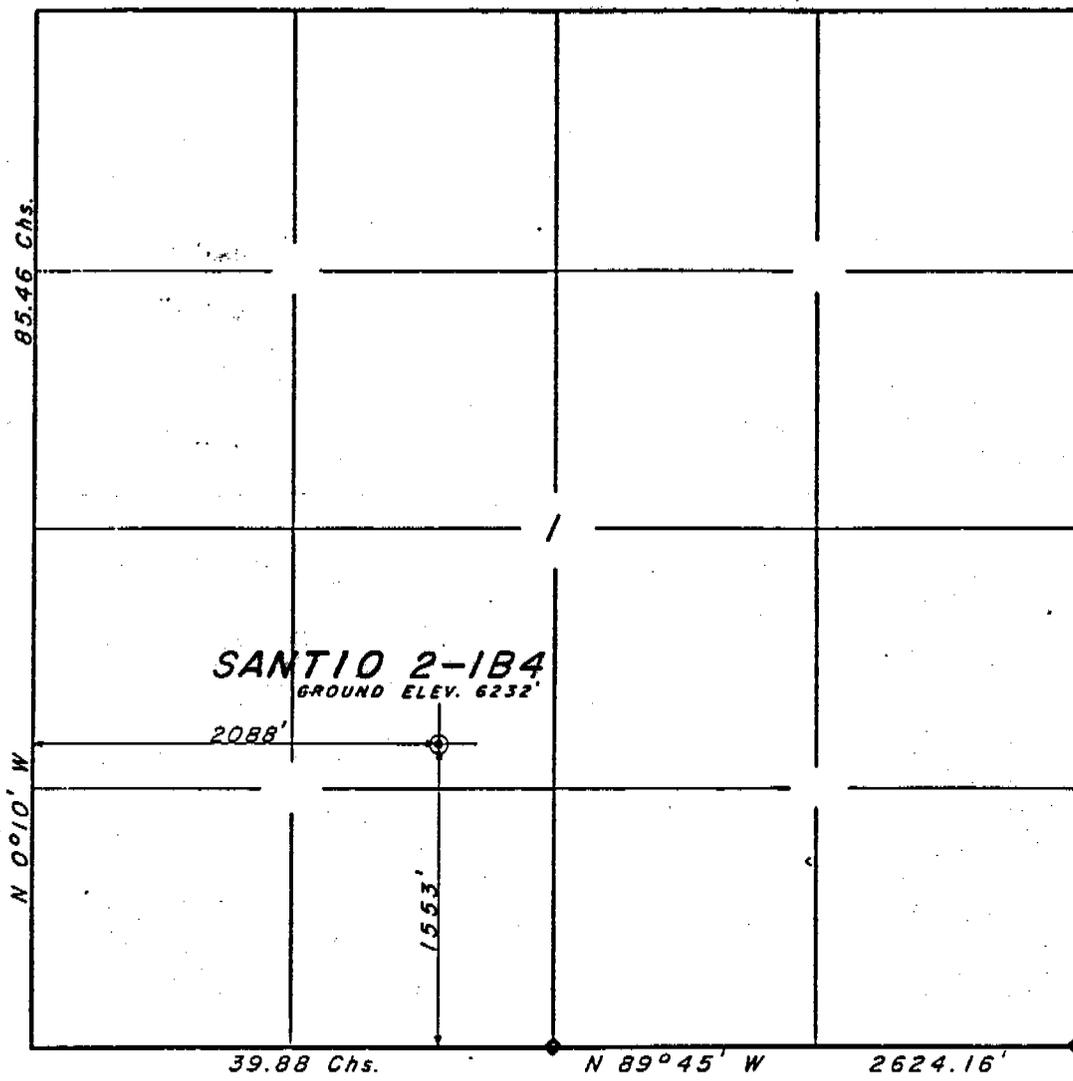
Jeff Niemeyer  
Senior Landman

JN:pc  
enclosure

cc: John Boza,  
State of Utah Natural Resources

**UTEX OIL COMPANY  
WELL LOCATION PLAT  
SANTIO 2-1B4**

LOCATED IN THE NE<sup>1</sup>/<sub>4</sub> OF THE SECTION 1, R4W, U.S.B.&M.



SCALE: 1"=1000'

**LEGEND & NOTES**

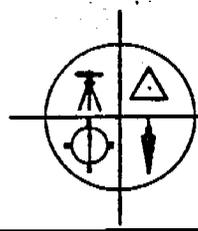
- ◆ CORNERS FOUND OR RE-ESTABLISHED BY THIS SURVEY.

THE GENERAL LAND OFFICE PLAT WAS USED FOR REFERENCE AND CALCULATIONS.

**SURVEYOR'S CERTIFICATE**

I hereby certify that this plat was prepared from field notes of an actual survey performed by me, during which the shown monuments were found or established.

*Jerry D. Allred*  
 \_\_\_\_\_  
 Jerry D. Allred, Registered Land Surveyor, Cert. No. 3817 (Utah)



**JERRY D. ALLRED & ASSOCIATES**  
 Surveying & Engineering Consultants

121 North Center Street  
 P.O. Drawer C  
 DUCHESNE, UTAH 84021  
 (801) 738-5352

25 Oct. '85

79-121-100