



20 North Broadway, Suite 1500  
Oklahoma City, Oklahoma 73102-8260

Telephone: (405) 235-3611  
Fax: (405) 552-4667

November 27, 2001

Michael Stogner  
Oil Conservation Division  
2440 S. Pacheco  
Santa Fe, NM 87505

Dear Mr Stogner,

Devon Energy respectfully requests an approval of an unorthodox location for the Maljamar 10 Fed #1 well. The well is located 660' FSL & 1530' FEL of Sec 10, T17S, R32E, in Lea County, NM. The well was originally permitted and drilled as a 320 acre E/2 stand up Morrow/Atoka location. After testing an unproductive Morrow zone, the well was recompleted to the Cisco-Canyon, an oil zone with a 40 acre spacing. This 40 acre spacing caused the location to encroach on an interior line of the section. The ownership of the E/2 of the section is consistent and the units affected (O & P) have the same ownership. There is no offsetting production from the Cisco-Canyon within 1 mile of the location.

We were notified of the unorthodox condition of the well by the Hobbs OCD office and have agreed to shut-in the well pending the approval. Your prompt attention to this matter is appreciated. If you need additional information, please call Jim Blount at 405-228-4301.

Sincerely,

  
James Blount

James.Blount@~~DEVON~~.com  
dvn

DISTRICT I  
1825 N. French Dr., Hobbs, NM 88240

DISTRICT II  
811 South First, Artesia, NM 88210

DISTRICT III  
1800 Rio Brazos Rd., Artec, NM 87410

DISTRICT IV  
2040 South Pacheco, Santa Fe, NM 87506

State of New Mexico  
Energy, Minerals and Natural Resources Department

EXHIBIT # 2

Form C-102  
Revised March 17, 1988

Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

**OIL CONSERVATION DIVISION**  
2040 South Pacheco  
Santa Fe, New Mexico 87504-2088

AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

API Number 30-025-35317-00	Pool Code	Pool Name WILDCAT (DISCO-CANYON)
Property Code 27049	Property Name MALJAMAR "10" FEDERAL	Well Number 1
OGRID No. 20305	Operator Name DEVON SFS OPERATING, INC.	Elevation 4108'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	10	17 S	32 E		660	SOUTH	1530	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres 40	Joint or Infill	Consolidation Code	Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><u>Candace R. Graham</u> Signature</p> <p>Candace R. Graham Printed Name</p> <p>Operations Engr. Tech. Title</p> <p>November 10, 2000 Date</p>
	<p><b>SURVEYOR CERTIFICATION</b></p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my belief.</p> <p>October 11, 2000 Date</p> <p><u>W. G. Jones</u> Signature &amp; Seal Professional Surveyor</p> <p>W.G. No. 0578A Certificate No. 7977 Professional Surveyor</p> <p>HASIN SURVEYS</p>
	<p>Lat - N32°50'37.2" Lon - W103°45'02.4"</p>
	<p>4111.2' 4113.6' 1530' 4103.5' 4104.0' 660'</p>

## Stogner, Michael

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**From:** Kautz, Paul  
**Sent:** Thursday, November 29, 2001 3:00 PM  
**To:** Stogner, Michael  
**Subject:** pool name

Poolid: 97160            Pool Name: Wildcat G-07 S173210O;Cisco-Canyon

Proposed Pool Name for February 2002 Nomenclature

Poolid: 97160            Pool Name: Maljamar;Cisco-Canyon, West

Maybe we can get him really confused and start talking about prorated oil or associated pools.

Paul F Kautz

State Of New Mexico  
Energy, Minerals and Natural Resources Department  
Oil Conservation Division  
1625 N French Dr  
Hobbs NM 88240  
pkautz@state.nm.us  
[www.emnrd.state.nm.us/ocd/](http://www.emnrd.state.nm.us/ocd/)  
505-393-6161 EXT 104 (Voice)  
505-393-0720 (FAX)

CMD :  
OG5SECT

ONGARD  
INQUIRE LAND BY SECTION

11/29/01 13:34:  
OGOMES -TQ  
PAGE NO:

Sec : 10 Twp : 17S Rng : 32E Section Type : NORMAL

***	***	***	C 40.00  Federal owned U U  A	B 40.00  Federal owned U A A	A 40.00  Federal owned U
E 40.00  Federal owned U A	F 40.00  Federal owned U A A A	G 40.00  Federal owned U A C	H 40.00  Federal owned U A		

PF01 HELP  
PF07 BKWD

PF02  
PF08 FWD

PF03 EXIT  
PF09 PRINT

PF04 GoTo  
PF10 SDIV

PF05  
PF11

PF06  
PF12

CMD :  
OG5SECT

ONGARD  
INQUIRE LAND BY SECTION

11/29/01 13:34:  
OGOMES -TQ  
PAGE NO:

Sec : 10 Twp : 17S Rng : 32E Section Type : NORMAL

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M 40.00  Federal owned U A	N 40.00  Federal owned U A	O 40.00  Federal owned U A A	P 40.00  Federal owned U

PF01 HELP  
PF07 BKWD

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PF03 EXIT  
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PF04 GoTo  
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CMD : ONGARD 11/29/01 13:59:  
OG6C101 C101-APPLICATION FOR PERMIT TO DRILL OGOMES -TQ

OGRID Idn : 20305 API Well No: 30 25 35317 APD Status(A/C/P): A  
Opr Name, Addr: DEVON SFS OPERATING INC Aprvl/Cncl Date : 11-10-20  
20 N. BROADWAY  
STE 1500  
OKLAHOMA CITY,OK 73102

Prop Idn: 27049 MALJAMAR 10 FEDERAL Well No: 1

	U/L	Sec	Township	Range	Lot Idn	North/South	East/West
Surface Locn : O	10	17S	32E			FTG 660 F S	FTG 1530 F E
OCD U/L : O		API County :	25				

Work typ(N/E/D/P/A) : N Well typ(O/G/M/I/S/W/C): O Cable/Rotary (C/R) :  
Lease typ(F/S/P/N/J/U/I): F Ground Level Elevation : 4108

State Lease No: Multiple Comp (S/M/C) : S  
Prpsd Depth : 12700 Prpsd Frmtn : MORROW

E0009: Enter data to modify record

PF01 HELP PF02 PF03 EXIT PF04 GoTo PF05 PF06 CONFIRM  
PF07 PF08 PF09 PRINT PF10 C102 PF11 HISTORY PF12

**Insert**

**Color Page/Photo**

**Here**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

N.M. Oil Cons. Division  
1625 N. French Dr.  
Hobbs, NM 88240

FORM APPROVED  
OMB No. 1004-0135  
Expires November 30, 2000

**SUNDRY NOTICES AND REPORTS ON WELLS**

*Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.*

Lea County  
NM-LC059576

6. If Indian, Allottee or Tribe Name  
N/A

7. If Unit or CA/Agreement, Name and/or No.  
N/A

8. Well Name and No.  
Maljamar "10" Federal #1

9. API Well No.  
30-025-35317

10. Field and Pool, or Exploratory Area  
Wildcat (Atoka)

11. County or Parish, State  
Lea County  
New Mexico

**SUBMIT IN TRIPLICATE - Other instructions on reverse side**

1. Type of Well  
 Oil Well  Gas Well  Other Proposed gas well

2. Name of Operator  
Devon-SFS Operating, Inc. Wally Frank, Senior Ops  
Engr (405) 552-4595

3a. Address  
20 N. Broadway, Suite 1500, OKC, OK 73102

3b. Phone No. (include area code)  
(405)235-3611

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
660' FSL & 1530' FEL, Unit O, Section 10-T17S-R32E, Lea Cnty, NM

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/ Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <u>spud, setting casing strings,</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<u>WOCU</u>
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

This well spud on 03-20-2001 at 1600 hrs and drld a 17 1/2" hole to 1032'. On 03-21-2001 ran 24 jts 13 3/8" 48# H-40 ST&C csg, set at 1031'; cemented w/563 sx 35/65 Pozmix "C" + 300 sx Class "C"; TOC at surface. WOC 23 hrs.

Drld 12 1/4" hole to 4610'. On 04-01-2001 ran 108 jts 8 5/8" 32# J-55 LT&C csg, set at 4609'; cemented w/1500 sx 35/65 Pozmix "C" + 625 sx 60/40 Pozmix "C"; TOC at surface. WOC 36 hrs.

Began drlg 7 7/8" hole. Reached TD 12,800' at 1830 hrs 04-27-2001. Circ'd, washed and reamed. 05-04-2001 Baker Hughes ran Dual Laterlog/GR and Compensated Z-Densilog/Compensated Neutron/GR logs.

On 05-07-2001 ran 303 jts 5 1/2" 17# L-80 LT&C csg, set at 12,799' w/DV tool at 6382'; cemented: stage 1 w/1500 sx Pozmix "C"; stage 2 w/425 sx Poz "C" + 100 sx Class "H".

Released rig at 1400 hrs 05-08-2001. WOCU.

ACCEPTED FOR RECORD  
SEP 26 2001  
LES BABYAK  
PETROLEUM ENGINEER

14. I hereby certify that the foregoing is true and correct  
Name (Printed/Typed)

Candace R. Graham

Title  
Engineering Tech.

Signature

*Candace R. Graham*

Date  
09/17/2001

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

*[Signature]*

Title

Date

Conditions of approval, if any, are attached. Approval of this notice 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.

Office

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

(Instructions on reverse)

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

**New Mexico Oil Conservation Division, District J.**  
**1625 N. French Drive**  
**Hobbs, NM 88001**

**APPLICATION FOR PERMIT TO DRILL OR DEEPEN** 147

1a. TYPE OF WORK: DRILL  DEEPEN

b. TYPE OF WELL:  
 OIL WELL  GAS WELL  Other \_\_\_\_\_  
 SINGLE ZONE  MULTIPLE ZONE

2. NAME OF OPERATOR  
**DEVON SFS OPERATING, INC.**

3. ADDRESS AND TELEPHONE NO.  
**20 N. BROADWAY, SUITE 1500, OKC, OK 73102 (405) 235-3611**

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*  
 At surface **660' FSL & 1530' FEL, Unit O, Section 10-T17S-R32E, Eddy Cnty, NM**  
*Lea*  
 At top proposed prod. zone (same)

5. LEASE DESIGNATION AND SERIAL NO.  
**NM-LC059576**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO.  
**MALJAMAR "10" FEDERAL #1**

9. API WELL NO.  
**30-025-35317**

10. FIELD AND POOL, OR WILDCAT  
**wildcat Maljamar (Morrow)**

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA  
**Unit O Section 10, T17S, R32E**

12. COUNTY OR PARISH  
**Lea County**

13. STATE  
**New Mexico**

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
**Approximately 1 mile south of Maljamar, New Mexico, on Hwy 82**

15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. **660'**  
(Also to nearest drlg. unit line if any)

16. NO. OF ACRES IN LEASE **320**

17. NO. OF ACRES ASSIGNED TO THIS WELL **320**

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

19. PROPOSED DEPTH **12,700'**

20. ROTARY OR CABLE TOOLS\*  
**Rotary**

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
**GL 4108'**

22. APPROX. DATE WORK WILL START\*  
**December, 2000**

23. PROPOSED CASING AND CEMENTING PROGRAM					
SIZE OF HOLE	GRADE, SIZE OF CASING		WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	H-40	13 3/8"	48.0	<del>650'</del> 1025'	approx 600 sx (est TOC @ surface)
12 1/4"	J-55	8 5/8"	32.0	4,600'	approx 1900 sx (est TOC @ surface)
7 7/8"	L-80	5 1/2"	17.0	12,700'	approx 700 sx (est TOC @ 6,500')

Devon Energy proposes to drill a Morrow well to TD 12,700'± for commercial quantities of gas. If the well is deemed noncommercial, the well bore will be plugged and abandoned per Federal regulations. Programs to adhere to onshore oil and gas regulations are outlined in the following exhibits and attachments.

- Drilling Program**  
**Surface Use and Operating Plan**  
 Exhibits #1 = Blowout Prevention Equipment  
 Exhibit #2 = Location and Elevation Plat  
 Exhibits #3 = Road Map and Topo Map  
 Exhibit #4 = Wells Within 1 Mile Radius  
 Exhibits #5 = Production Facilities Plat  
 Exhibit #6 = Rotary Rig Layout  
 Exhibit #7 = Casing Design  
 H<sub>2</sub>S Operating Plan  
 Archeological clearance report

The undersigned accepts all applicable terms, conditions, stipulations and restrictions concerning operations conducted on the leased land or portions thereof, as described below  
 Lease #: NM-LC059573  
 Legal Description: E/2 Section 10-T17S-R32E

Bond Coverage: Nationwide  
 BLM Bond #: UT-1195

**OPER. OGRID NO. 20305**  
**PROPERTY NO. 27049**  
**POOL CODE ✓**  
**EFF. DATE 12-22-00**  
**API NO. 30-025-35317**

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertic

SIGNED Candace R. Graham TITLE Engineering Technician DATE November 10, 2000

\*(This space for Federal or State office use)  
 PERMIT NO. Chris Williams APPROVAL DATE \_\_\_\_\_

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 /s/LARRY D. BRAY TITLE Assistant Field Manager, Land and Minerals DATE DEC 19 2000  
 See Instructions On Reverse Side **APPROVED FOR 1 YEAR**

## DRILLING PROGRAM

Attached to Form 3160-3  
Devon SFS Operating, Inc.  
MALJAMAR "10" FEDERAL #1  
660' FSL & 1530' FEL, Section O-10-T17S-R32E  
Lea County, New Mexico

1. Geologic Name of Surface Formation

Permian

2. Estimated Tops of Important Geologic Markers

Rustler	970'
San Andres	3,850'
Glorieta	5,500'
Yeso (Paddock)	5,570'
Tubb Sand	6,925'
Abo	7,630'
Wolfcamp	9,100'
Wolfcamp Pay	9,770'
Cisco	10,120'
Cisco - Canyon Pay	10,440-10,680'
Canyon Pay	10,740'
Strawn	11,510'
Atoka	11,780'
Morrow	12,100'
Morrow Clastics	12,330'
Missippian (Chester)	12,600'
TD	±12,700'

3. Estimated Depths of Anticipated Fresh Water, Oil or Gas

The estimated depths at which water, oil and gas will be encountered are as follows.

Water: Random fresh water from surface to approximately 650'  
Oil: San Andres, Glorieta  
Gas: Wolfcamp, Cisco-Canyon, Strawn, Atoka, Morrow, Missippian

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 13 3/8" casing at 650' (circulating cement back to surface). The oil and gas intervals will be isolated by setting 8 5/8" casing at 4,600' (circulating cement back to surface) and 5 1/2" casing at TD (bringing cement top to approximately 6,500').

4. Casing Program

<u>Hole Size</u>	<u>Interval</u>	<u>Casing OD</u>	<u>Weight, ppf</u>	<u>Grade</u>	<u>Type</u>
17 1/2"	0-650' 1050'	13 3/8"	48	H-40	ST&C
12 1/4"	0-4,600'	8 5/8"	32	J-55	LT&C
7 7/8"	0-12,700'±	5 1/2"	17	L-80	Buttress / LT&C

Cementing Program

- 13 3/8" Surface Casing: Cement to surface -- with 321 sx Pozmix (35% Poz, 65% Class C) with 6% Bentonite, 2% CaCl<sub>2</sub>, 1/4 lb/sx Cello Flakes + 250 sx Class C with 2% CaCl<sub>2</sub>, 1/4 lb/sx Cello Flakes.
- 8 5/8" Intermediate Casing: Cement to surface -- with 1310 sx Pozmix (35% Poz, 65% Class C) with 6% Bentonite, 5% NaCl<sub>2</sub>, 1/4 lb/sx Cello Flakes + 614 sx Pozmix (60% Poz, 40% Class C) with 5% NaCl<sub>2</sub>, 4% MPA-1, 1/4 lb/sx Cello Flakes.
- 5 1/2" Production Casing: Cement to ±6500' -- with 524 sx Pozmix (15% Poz, 61% Class C, 11% BA-90) with 2% KCl<sub>2</sub>, 2 lb/sx EC-2, 0.3% CD-32, 5 lb/sx LCM-1, 0.6% FL-25, 0.6% FL-52, 1/4 lbs/sx Cello Flakes + 200 sx Class H with 15% R-3, 3% KCL<sub>2</sub>, 1% FL-25.

The cement volumes for the 5 1/2" casing will be revised pending the caliper measurement from the open hole logs.

5. Minimum Specifications for Pressure Control

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a (3M system) double ram type (3000 psi WP) preventer and a bag-type (Hydril) preventer (3000 psi WP). Both units will be hydraulically operated and the ram type preventer will be equipped with blind rams on top and 4 1/2" drill pipe rams on bottom. Both BOP's will be installed on the 8 5/8" surface casing and utilized continuously until total depth is reached. As per Bureau of Land Management Drilling Operations Order #2, prior to drilling out the 8 5/8" casing shoe, the BOP's and Hydril will be function tested.

Pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These functional tests will be documented on the daily drillers log. A 2" kill line and 3" choke line will be incorporated in the drilling spool below the ram-type BOP. Other accessory BOP equipment will include a kelly cock, floor safety valve, choke lines and choke manifold having 3000 psi WP rating.

6. Types and Characteristics of the Proposed Mud System

The well will be drilled to total depth using brine with starch mud systems. Depths of systems are as follows.

Depth	Type	Weight (ppg)	Viscosity (1/sec)	Water Loss (cc)
0' - <del>650'</del> 1050'	Fresh Water			
1050' - 4600'	Brine Water	10	28 - 30	No control
4600' - 9100'	Cut Brine	8.8	28 - 30	No control
9100' - TD	Starch	9.8	28 - 38	4 - 8

The necessary mud products for weight addition and fluid loss control will be on location at all times.

7. Auxiliary Well Control and Monitoring Equipment

- A. A kelly cock will be in the drill string at all times.
- B. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.
- C. Hydrogen Sulfide detection equipment (Compliance Package) will be in operation from drilling out 13 3/8" casing shoe until TD.

8. Logging, Testing and Coring Program

- A. Drill stem tests may be run on potential pay interval after running open hole logs.
- B. The open hole electrical logging program will be as follows.
  - a) Platform Express-HALS: GR/CNL/SONIC from TD to surface
  - b) or run ALL/MCFL/Cal/CNL/TDD/PEF in combination from TD to surface
  - c) FMI use optional as determined by geologist
- C. No coring program is planned.
- D. Additional testing may be initiated subsequent to setting the 5 1/2" production casing. Specific intervals will be targeted based on log evaluation, geological sample shows and drill stem tests.

9. Abnormal Pressures, Temperatures and Potential Hazards

No abnormal pressures or temperatures are foreseen. The anticipated bottom hole temperature at total depth is 175 degrees and maximum bottom hole pressure is 6500 psig. Hydrogen sulfide gas is associated with the Bone Spring formation in this area. A hydrogen sulfide operations plan will be implemented prior to drilling out from under the intermediate casing string (see attached "Hydrogen Sulfide Operations Plan"). No major loss circulation intervals have been encountered in adjacent wells.

10. Anticipated Starting Date and Duration of Operations

The Carlsbad, New Mexico, Bureau of Land Management office has performed the onsite inspection for the proposed pad site of this location.

A cultural resources examination has been completed by Southern New Mexico Archaeological Services, Inc. and submitted to the Bureau of Land Management in August, 2000, as report number SNMAS-00NM-410. Road and location preparation will not be undertaken until approval has been received from the Bureau of Land Management. If approved, this well will be drilled as part of a development project. The anticipated spud date for the project is in December, 2000. The drilling operation should require approximately 45 days. If the well is deemed productive, completion operations will require, at minimum, an additional 30 days of testing to ascertain whether permanent production facilities will be constructed.

## SURFACE USE AND OPERATING PLAN

Attachment to Form 3160-3  
Devon SFS Operating, Inc.  
MALJAMAR "10" FEDERAL #1  
660' FSL & 1530' FEL, Section O-10-T17S-R32E  
Lea County, New Mexico

### 1. Existing Roads

- A. The well site and elevation plat for the proposed MALJAMAR "10" FEDERAL #1 are reflected on Exhibit #2. This well was staked by Basin Surveyors in Hobbs, New Mexico.
- B. All roads into the location are depicted in Exhibit #3. New construction from the existing lease road will be used to access the location. New construction will conform to the specifications outlined in Item #2 below.
- C. Directions to location: From the junction of Highway 82 and County Road 33 in Maljamar, New Mexico, go south on County Road 33 approximately 0.6 mile to County Road 125; to a point on the southwest corner of MALJAMAR "10" FEDERAL #1 proposed location.

### 2. Proposed Access Road

Exhibit #3 shows the existing lease road. Access to this location will require construction of approximately 150' of new road from the existing lease road. All new construction will adhere to the following.

- A. The maximum width of the road will be 15'. It will be crowned and made of 6" of rolled and compacted caliche. Water will be deflected, as necessary, to avoid accumulation and prevent surface erosion.
- B. Surface material will be native caliche. This material will be obtained from a Bureau of Land Management approved pit nearest in proximity to the location. The average grade will be approximately 1%.
- C. No cattle guards, grates or fence cuts will be required.
- D. No turnouts are planned.

### 3. Location of Existing Wells

Exhibit #4 shows all existing wells within a one-mile radius of the proposed MALJAMAR "10" FEDERAL #1.

MALJAMAR "10" FEDERAL #1  
SURFACE USE AND OPERATING PLAN  
PAGE 2

4. Location of Existing and/or Proposed Facilities

A. In the event the well is found productive, a tank battery would be constructed.

1. Exhibit #5 shows the battery facility to be utilized by the MALJAMAR "10" FEDERAL #1.
2. The tank battery, all connections and all lines will adhere to API standards.
3. The well may be operated by means of an electric prime mover. Electric power poles will be set along side of the access road if necessary.

B. If the well is productive, rehabilitation plans are as follows.

1. The reserve pit will be back-filled after the contents of the pit are dry (within 120 days after completion, weather permitting).
2. Caliche from unused portions of the drill pad will be removed. The original topsoil from the well site will be returned to the location. The drill site will then be contoured to the original natural state.

5. Location and Type of Water Supply

The MALJAMAR "10" FEDERAL #1 will be drilled using a combination of brine and fresh water mud systems (outlined in Drilling Program). The water will be obtained from commercial sources and will be transported over the existing and proposed roads. Additionally, produced salt water from lease gathering tanks may be utilized. No water well will be drilled on the location.

6. Source of Construction Materials

All caliche utilized for the drilling pad and proposed access road will be obtained from an existing Bureau of Land Management approved pit. All roads will be constructed of 6" rolled and compacted caliche.

7. Methods of Handling Water Disposal

- A. Drill cuttings will be disposed into the reserve pit.
- B. Drilling fluids will be contained in steel mud tanks. The reserve pit will contain excess drilling fluid or fluid from the well during drilling, cementing and completion operations. The reserve pit will be an earthen pit roughly 125' x 125' x 6', or smaller, in size.
- C. The reserve pit will be fenced on three sides throughout drilling operations and will be totally isolated upon removal of the rotary rig. The pit will be lined using a 5-7 mil plastic to minimize loss of drilling fluids and saturation of the ground with brine water used during drilling.
- D. Water produced from the well during completion operations will be disposed into a steel tank or reserve pit, if volumes prove excessive. After placing the well on production through the production facilities, all water will be collected in tanks. Produced oil will be separated into steel stock tanks until sold.

MALJAMAR "10" FEDERAL #1  
SURFACE USE AND OPERATING PLAN  
PAGE 3

- E. A portable chemical toilet will be available on the location for human waste during the drilling operations.
- F. Garbage, trash and waste paper produced during drilling operations will be collected in a contained trailer and disposed at an approved landfill. All waste material will be contained to prevent scattering by the wind. All water, fluids, salt or other chemicals will be disposed into the reserve pit. No toxic waste or hazardous chemicals will be generated by this operation.
- G. All waste material will be removed within 30 days after the well is either completed or abandoned. The reserve pit will be completely fenced until it has dried. At the point the reserve pit is found sufficiently dry, it will be backfilled and reclaimed as per Bureau of Land Management specifications. Only the portion of the drilling pad used by the production equipment (pumping unit and tank battery) will remain in use. If the well is deemed non-commercial only a dry hole marker will remain.

8. Ancillary Facilities

No permanent campsite or other facilities will be constructed as a result of this well.

9. Well Site Layout

- A. The drill pad is shown on Exhibit #6. Approximate dimensions of the pad, pits and general location of the rig equipment are displayed. Top soil will be stored adjacent to the pad until reclamation efforts are undertaken. Only modest cuts will be necessary to build the pad which will be covered with 6" of compacted caliche.
- B. No permanent living facilities are planned, but temporary trailers for the tool pusher, drilling foreman and mud logger may be on location throughout drilling operations.
- C. The reserve pit will be lined using plastic sheeting of 5-7 mil thickness.

10. Plans for Restoration of Surface

- A. After concluding the drilling and/or completion operations, if the well is found non-commercial, the caliche will be removed from the pad and transported to the original caliche pit or used for other drilling locations. The road will be reclaimed as directed by the Bureau of Land Management. The reserve pit area will be broken out and leveled after drying to a condition where these efforts are feasible. The original top soil will be returned to the pad and contoured, as close as possible, to the original topography.
- B. The pit lining will be buried or hauled away in order to return the location and road to their pristine nature. All pits will be filled and location leveled, weather permitting, within 120 days after abandonment.
- C. The location and road will be rehabilitated as recommended by the Bureau of Land Management.
- D. The reserve pit will be fenced on three sides throughout drilling operations. After the rotary rig is removed, the reserve pit will be fenced on the fourth side to preclude endangering wildlife. The fencing will be in place until the pit is reclaimed.

MALJAMAR "10" FEDERAL #1  
SURFACE USE AND OPERATING PLAN  
PAGE 4

E. If the well is deemed commercially productive, the reserve pit will be restored as described in 10 (A) within 120 days subsequent to the completion date. Caliche from areas of the pad site not required for operations will be reclaimed. The original top soil will be returned to the area of the drill pad not necessary to operate the well. These unused areas of the drill pad will be contoured, as close as possible, to match the original topography.

11. Surface Ownership

The well site is owned by the Bureau of Land Management. Road routes have been approved and the surface location will be restored as per the Bureau of Land Management.

12. Other Information

A. The proposed location resting on loose sands is a relatively flat, slightly sloping southwest plain, with low dunes to the east, and isolated coppice dunes. Regionally the land area soils are loose gray sands with fragmented caliche. The vegetation is mesquite, shin oak, and various grasses.

B. There is permanent water in the immediate area.

C. A Cultural Resources Examination has been completed by Southern New Mexico Archaeological Services, Inc., report number SNMAS-00NM-410, and forwarded to the Bureau of Land Management office in Carlsbad, New Mexico.

13. Lessee's and Operator's Representative

The Devon SFS Operating, Inc. representatives responsible for ensuring compliance of the surface use plan are listed below.

Walter Frank, District Engineer  
Devon SFS Operating, Inc.  
20 North Broadway, Suite 1500  
Oklahoma City, OK 73102-8260  
(405) 552-4595 (office)  
(405) 364-3504 (home)

Don Mayberry, Superintendent  
Devon SFS Operating, Inc.  
Post Office Box 250  
Artesia, NM 88211-0250  
(505) 748-3371 (office)  
(505) 746-4945 (home)

Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access road; that I am familiar with the conditions that 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 Devon SFS Operating, Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Signed: Candace R. Graham  
Candace R. Graham, Engineering Tech.

Date: November 10, 2000

MINIMUM BLOWOUT PREVENTER REQUIREMENTS

3,000 psi Working Pressure

3 MWP

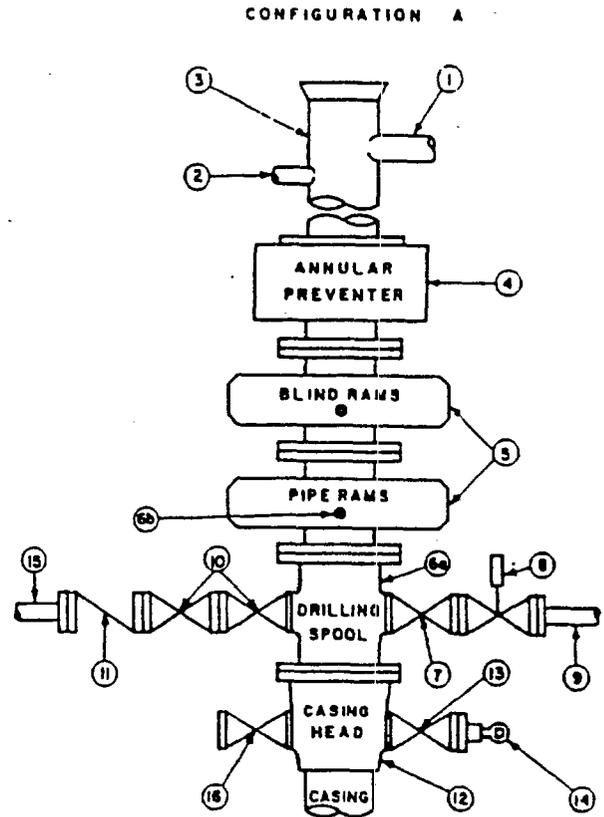
EXHIBIT # 1

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" min. kill line and 3" min choke line outlets		
6b	2" min. kill line and 3" min. choke line outlets in ram. (Alternate to 6a above.)		
7	Valve Gate <input type="checkbox"/> Plug <input type="checkbox"/>	3-1/8"	
8	Gate valve—power operated	3-1/8"	
9	Line to choke manifold		3"
10	Valves Gate <input type="checkbox"/> Plug <input type="checkbox"/>	2-1/16"	
11	Check valve	2-1/16"	
12	Casing head		
13	Valve Gate <input type="checkbox"/> Plug <input type="checkbox"/>	1-13/16"	
14	Pressure gauge with needle valve		
15	Kill line to rig mud pump manifold		2"

OPTIONAL

16	Flanged valve	1-13/16"	
----	---------------	----------	--



CONTRACTOR'S OPTION TO FURNISH:

1. All equipment and connections above bradenhead or casinghead. Working pressure of preventers to be 3,000 psi, minimum.
2. Automatic accumulator (80 gallon, minimum) capable of closing BOP in 30 seconds or less and, holding them closed against full rated working pressure.
3. BOP controls, to be located near drillers position.
4. Kelly equipped with Kelly cock.
5. Inside blowout preventer or its equivalent on derrick floor at all times with proper threads to fit pipe being used.
6. Kelly saver-sub equipped with rubber casing protector at all times.
7. Plug type blowout preventer tester.
8. Extra set pipe rams to fit drill pipe in use on location at all times.
9. Type RX ring gaskets in place of Type R.

MEC TO FURNISH:

1. Bradenhead or casinghead and side valves.
2. Wear bushing, if required.

GENERAL NOTES:

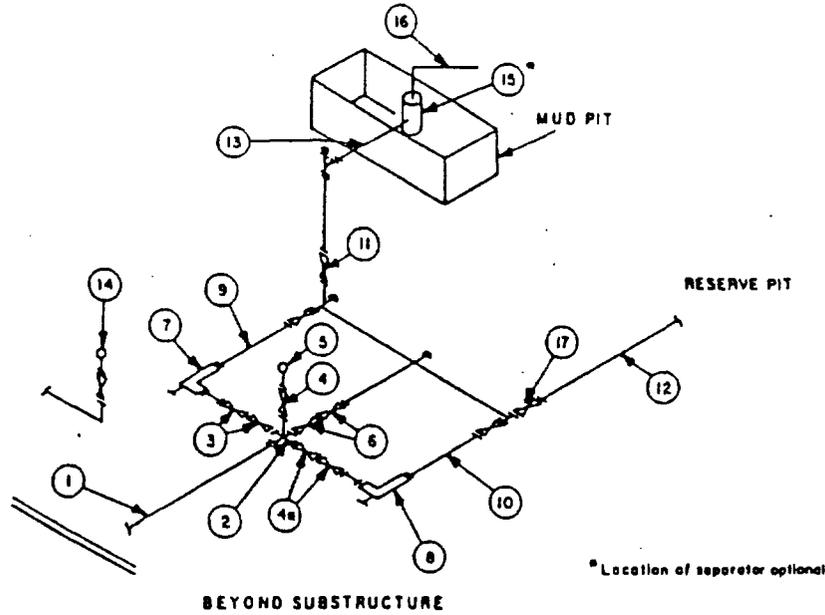
1. Deviations from this drawing may be made only with the express permission of MEC's Drilling Manager.
2. All connections, valves, fittings, piping, etc., subject to well or pump pressure must be flanged (suitable clamp connections acceptable) and have minimum working pressure equal to rated working pressure of preventers up through choke. Valves must be full opening and suitable for high pressure mud service.
3. Controls to be of standard design and each marked, showing opening and closing position.
4. Chokes will be positioned so as not to hamper or delay changing of choke beans. Replaceable parts for adjustable choke, other bean sizes, retainers, and choke wrenches to be conveniently located for immediate use.
5. All valves to be equipped with handwheels or handles ready for immediate use.
6. Choke lines must be suitably anchored.

7. Handwheels and extensions to be connected and ready for use.
8. Valves adjacent to drilling spool to be kept open. Use outside valves except for emergency.
9. All seamless steel control piping (3000 psi working pressure) to have flexible joints to avoid stress. Hoses will be permitted.
10. Casinghead connections shall not be used except in case of emergency.
11. Do not use kill line for routine fill-up operations.

**MINIMUM CHOKE MANIFOLD**  
3,000, 5,000 and 10,000 PSI Working Pressure

3 MWP · 5 MWP · 10 MWP

EXHIBIT # 1



MINIMUM REQUIREMENTS										
No.		3,000 MWP			5,000 MWP			10,000 MWP		
		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 type="checkbox"/> Plug <input type="checkbox"/> (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000
4	Valve Gate <input type="checkbox"/> Plug <input 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 type="checkbox"/> Plug <input 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 type="checkbox"/> Plug <input type="checkbox"/> (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000
12	Lines		3"	1,000		3"	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 type="checkbox"/> Plug <input type="checkbox"/> (2)	3-1/8"		3,000	3-1/8"		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 5,000 psi and 10,000 psi for drilling.

**EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTIONS**

1. All connections in choke manifold shall be welded, studded, flanged or Cameron clamp of comparable rating.
2. All flanges shall be API 6B or 6BX and ring gaskets shall be API RX or BX. Use only BX for 10 MWP.
3. All lines shall be securely anchored.
4. Chokes shall be equipped with tungsten carbide seats and needles, and replacements shall be available.
5. Choke manifold pressure and standpipe pressure gauges shall be available at the choke manifold to assist in regulating chokes. As an alternate with automatic chokes, a choke manifold pressure gauge shall be located on the rig floor in conjunction with the standpipe pressure gauge.
6. Line from drilling spool to choke manifold should be as straight as possible. Lines downstream from chokes shall make turns by large bends or 90° bends using bull plugged tees.
7. Discharge lines from chokes, choke bypass and from top of gas separator should vent as far as practical from the well.

Attachment to Exhibit #1  
NOTES REGARDING BLOWOUT PREVENTERS  
Devon SFS Operating, Inc.  
MALJAMAR "10" FEDERAL #1  
660' FSL & 1530' FEL, Section O-10-T17S-R32E  
Lea County, New Mexico

1. Drilling nipple will be constructed so it can be removed mechanically without the aid of a welder. The minimum internal diameter will equal BOP bore.
2. Wear ring will be properly installed in head.
3. Blowout preventer and all associated fittings will be in operable condition to withstand a minimum 3000 psi working pressure.
4. All fittings will be flanged.
5. A full bore safety valve tested to a minimum 3000 psi WP with proper thread connections will be available on the rotary rig floor at all times.
6. All choke lines will be anchored to prevent movement.
7. All BOP equipment will be equal to or larger in bore than the internal diameter of the last casing string.
8. Will maintain a kelly cock attached to the kelly.
9. Hand wheels and wrenches will be properly installed and tested for safe operation.
10. Hydraulic floor control for blowout preventer will be located as near in proximity to driller's controls as possible.
11. All BOP equipment will meet API standards and include a minimum 40 gallon accumulator having two independent means of power to initiate closing operation.

DISTRICT I  
1625 N. French Dr., Hobbs, NM 88240

DISTRICT II  
811 South First, Artesia, NM 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV  
2040 South Pacheco, Santa Fe, NM 87505

Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

**OIL CONSERVATION DIVISION**

2040 South Pacheco  
Santa Fe, New Mexico 87504-2088

AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

API Number 30-025-35317	Pool Code ✓	Pool Name wildcat; MALJAMAR (MORROW)
Property Code 27049	Property Name MALJAMAR "10" FEDERAL	Well Number 1
OGRID No. 20305	Operator Name DEVON SFS OPERATING, INC.	Elevation 4108'

**Surface Location**

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	10	17 S	32 E		660	SOUTH	1530	EAST	LEA

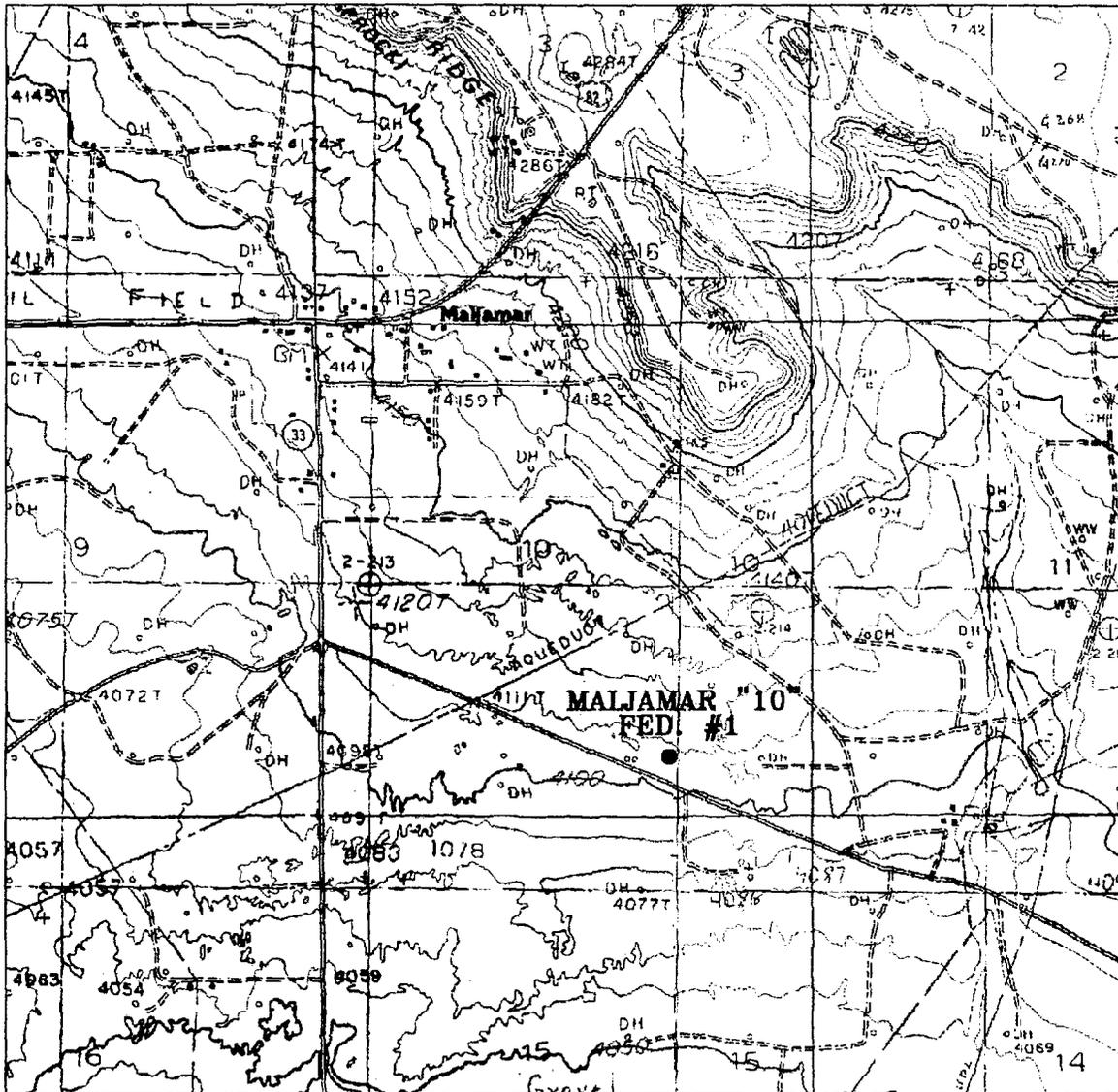
**Bottom Hole Location If Different From Surface**

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres 320	Joint or Infill	Consolidation Code	Order No.
------------------------	-----------------	--------------------	-----------

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<p><b>OPERATOR CERTIFICATION</b></p> <p><i>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</i></p> <p><u>Candace R. Graham</u> Signature</p> <p>Candace R. Graham Printed Name</p> <p>Operations Engr. Tech. Title</p> <p>November 10, 2000 Date</p>
	<p><b>SURVEYOR CERTIFICATION</b></p> <p><i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i></p> <p>October 11, 2000 Date Surveyed</p> <p>JONES Signature &amp; Seal of Professional Surveyor</p> <p>7977</p> <p>W.O. No. 0570A</p> <p>Certificate No. Jones 7977</p> <p>BASIN SURVEYS</p>
	<p>Lot - N32°50'37.2"</p> <p>Lon - W103°45'02.4"</p>
	<p>4111.2'</p> <p>4113.6'</p> <p>1530'</p> <p>4104.0'</p> <p>4103.5'</p> <p>660'</p>



**MALJAMAR "10" FEDERAL #1**  
 Located at 660' FSL and 1530' FEL  
 Section 10, Township 17 South, Range 32 East,  
 N.M.P.M., Lea County, New Mexico.

**basin**  
**surveys**  
 focused on excellence  
 in the oilfield

P.O. Box 1786  
 1120 N. West County Rd.  
 Hobbs, New Mexico 88241  
 (505) 393-7316 - Office  
 (505) 392-3074 - Fax  
 basin-surveys.com

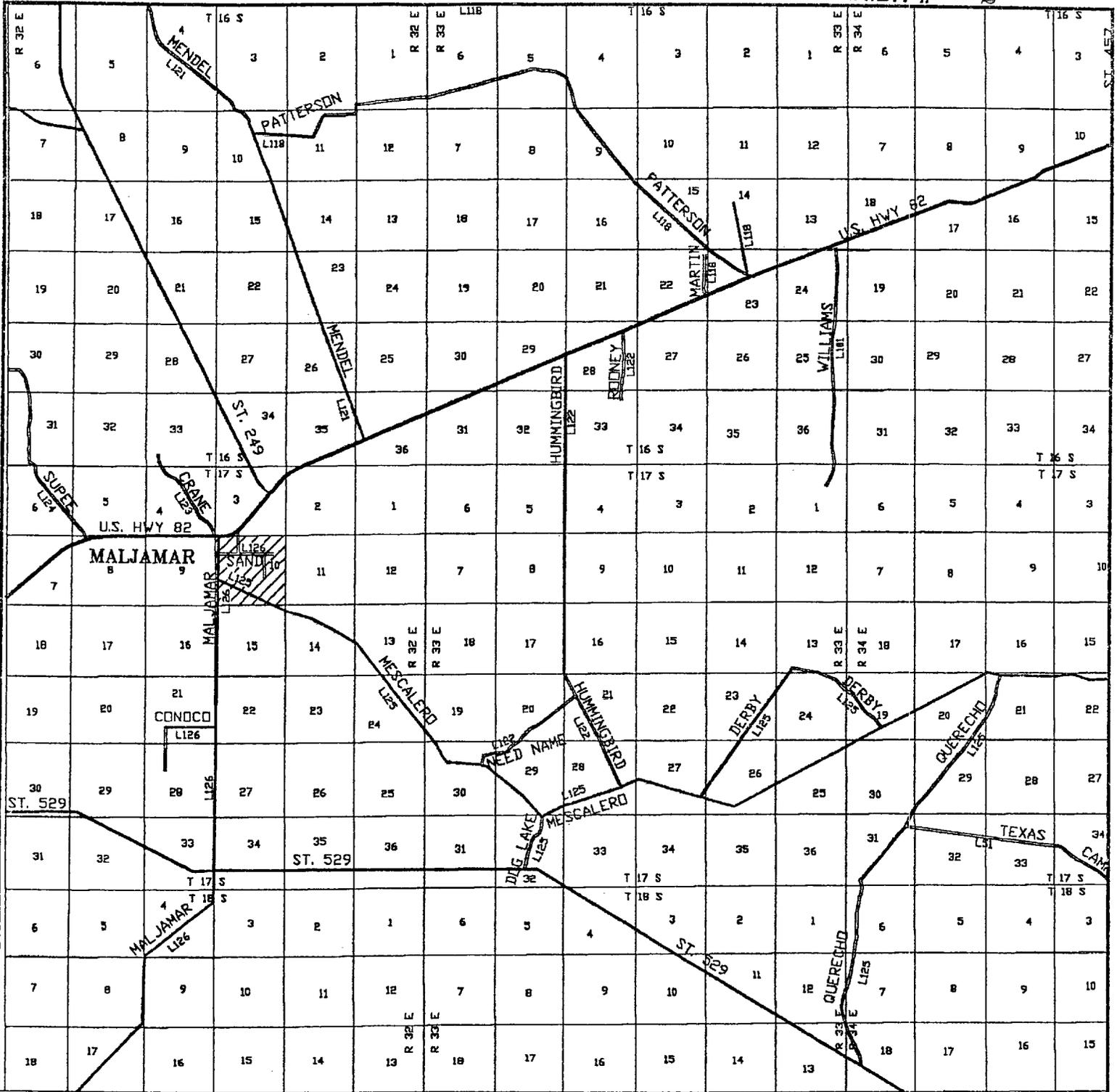
W.O. Number: 0570AA - KJG #122

Survey Date: 10-11-2000

Scale: 1" = 2000'

Date: 10-13-2000

**DEVON**  
**SFS OPERATING,**  
**INC.**



MALJAMAR "10" FEDERAL #1  
 Located at 660' FSL and 1530' FEL  
 Section 10, Township 17 South, Range 32 East,  
 N.M.P.M., Lea County, New Mexico.



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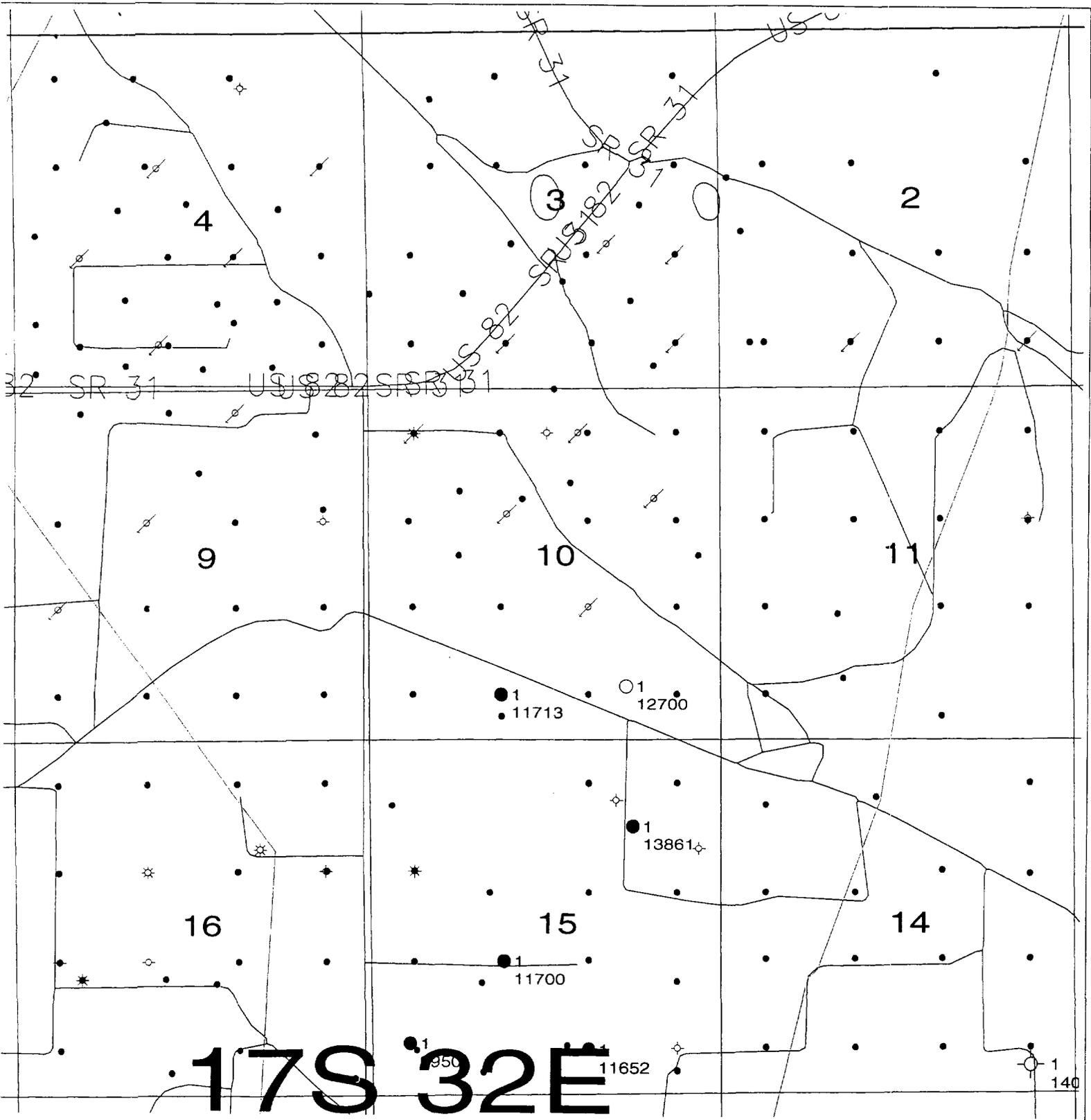
W.O. Number: 0570AA - KJG #122

Survey Date: 10-11-2000

Scale: 1" = 2 MILES

Date: 10-13-2000

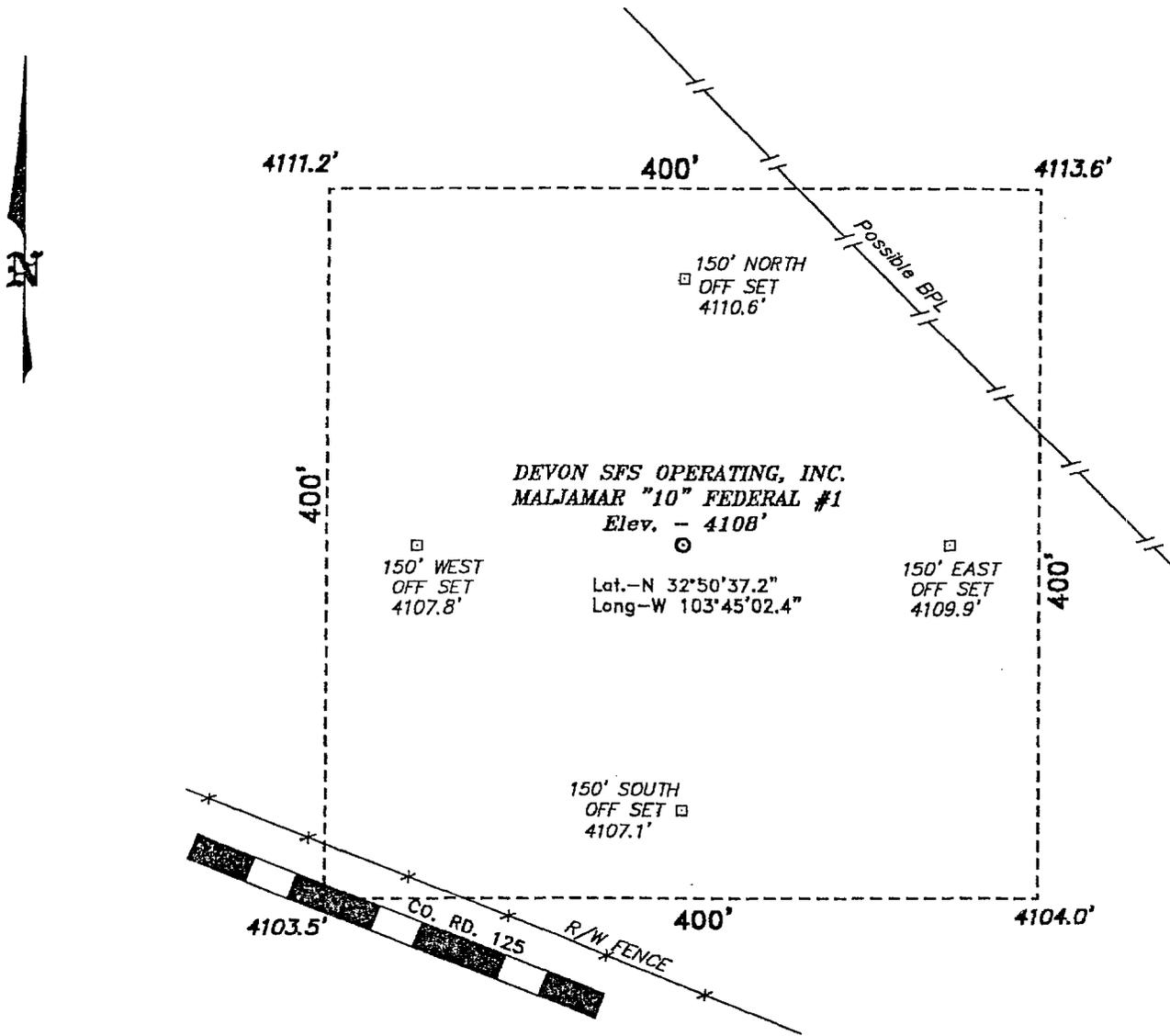
DEVON  
 SFS OPERATING,  
 INC.



### EXHIBIT 3

DEVON SFS OPERATING, INC		
MALJAMAR MORROW PROSPECT T17S-R32E LEA CO.,NM MALJAMAR 10 FED 1		
W. FRANK	Scale 1:24000.	11/3/00
PB-NO. EDDY REGIONAL	SFS-MALJAMAR	MJMR10-1.GPF

SECTION 10, TOWNSHIP 17 SOUTH, RANGE 32 EAST, N.M.P.M.,  
LEA COUNTY, NEW MEXICO.



Directions to Location:

FROM THE OF HWY 82 & CO. RD. 33 IN MALJAMAR,  
GO SOUTH ON CO. RD. 33 0.6 MILE TO CO. RD.  
125; TO A POINT ON THE SOUTHWEST CORNER OF  
THE PROPOSED WELL LOCATION.

**DEVON SFS OPERATING, INC.**

REF: Maljamar "10" Fed. No. 1 / Well Pad Topo

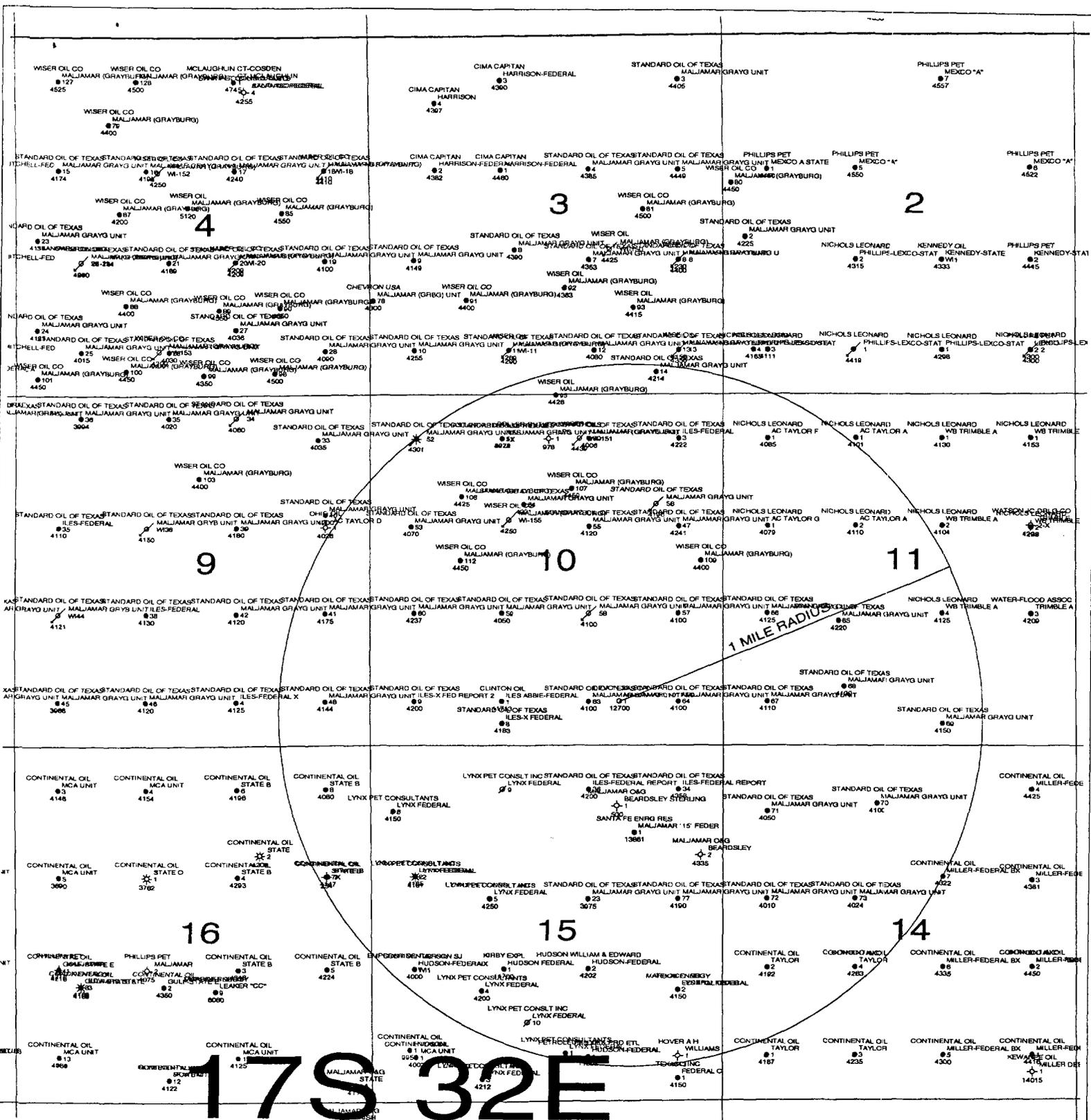
THE MALJAMAR "10" FED. No. 1 LOCATED 660' FROM  
THE SOUTH LINE AND 1530' FROM THE EAST LINE OF  
SECTION 10, TOWNSHIP 17 SOUTH, RANGE 32 EAST,  
N.M.P.M., LEA COUNTY, NEW MEXICO.

**BASIN SURVEYS** P.O. BOX 1786-HOBBS, NEW MEXICO

W.O. Number: 0570 Drawn By: **K. GOAD**

Date: 10-13-2000 Disk: KJG #122 - 0570A.DWG

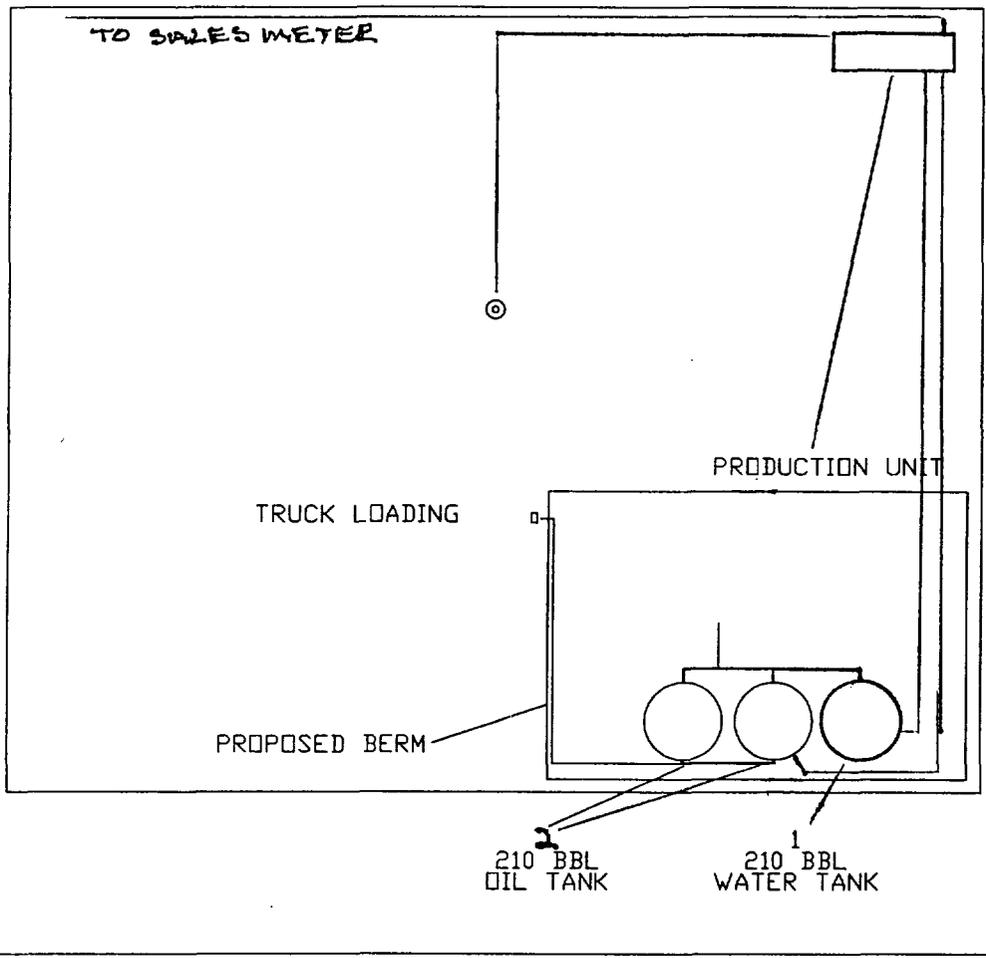
Survey Date: 10-11-2000 Sheet 1 of 1 Sheets



**T17S 32E**

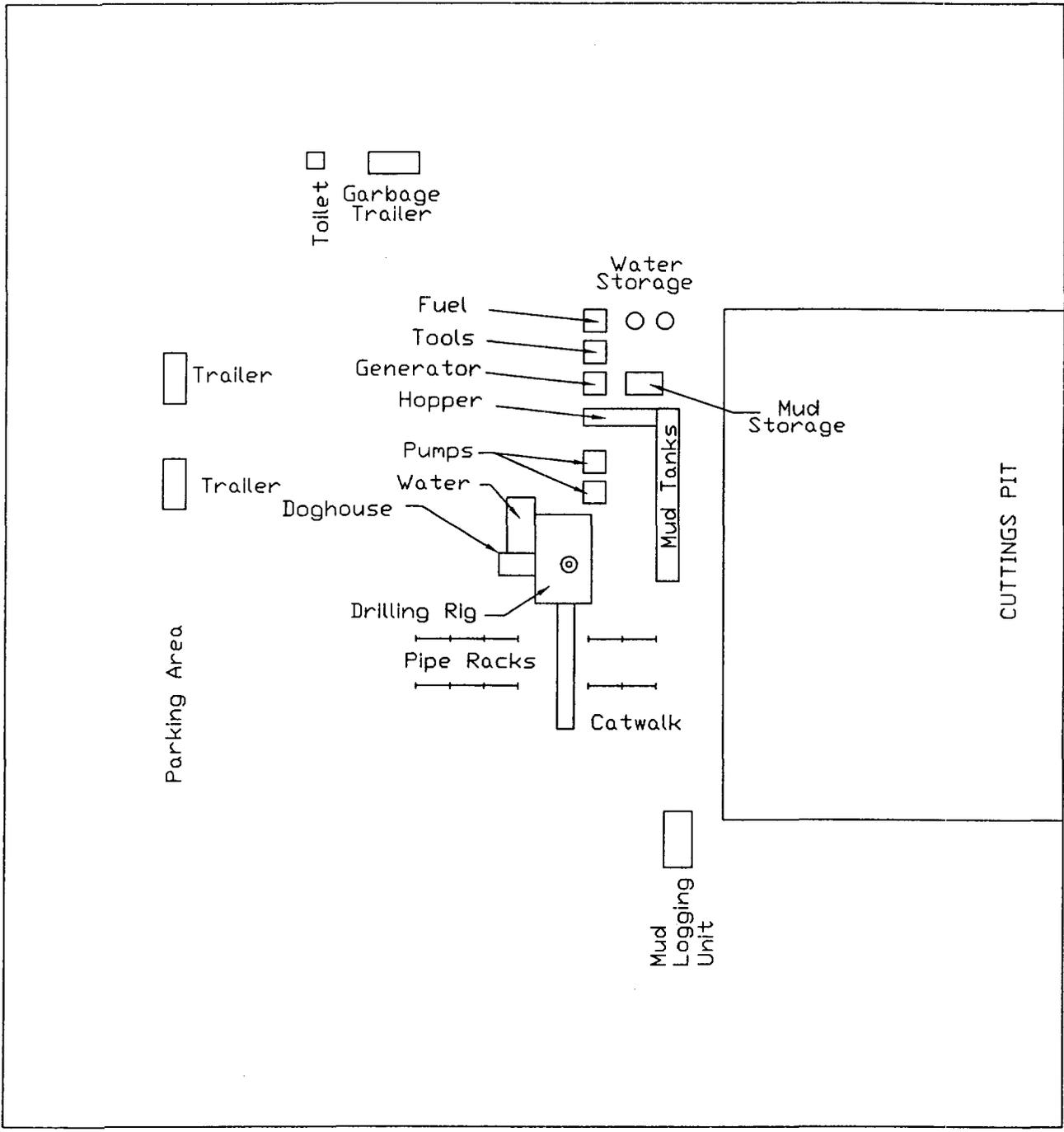
**EXHIBIT 4**

DEVON SFS OPERATING, INC		
MALJAMAR MORROW PROSPECT T17S-R32E LEA CO.,NM MALJAMAR 10 FED 1		
W. FRANK	Scale 1:24000.	11/3/00
PB-NO. EDDY REGIONAL	SFS-MALJAMAR	MJMR1014.GPF



DEVON SFS OPERATING, INC.  
 MALJAMAR MARROW UNIT  
 EDDY COUNTY, NEW MEXICO

EXHIBIT #5  
 TANK BATTERY  
 Sec 10 - T17S - R32E



DEVON SFS OPERATING, INC.  
 MALJAMAR MORROW UNIT  
 EDDY COUNTY, NEW MEXICO

DRILLING PAD FOR  
 MALJAMAR 10 FED 1  
**EXHIBIT 6**

Well name: **Maljimar 10 Fed. #1**  
 Operator: ~~Devon Energy Production Company, L.P.~~ DEVON SFS OPERATING, INC.  
 String type: Surface  
 Location: Sec. 10, T17S, R32E, Lea County, NM

**Design parameters:**

Collapse

Mud weight: 8.400 ppg  
 Design is based on evacuated pipe.

**Minimum design factors:**

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

**Environment:**

H2S considered? No  
 Surface temperature: 75 °F  
 Bottom hole temperature: 80 °F  
 Temperature gradient: 0.80 °F/100ft  
 Minimum section length: 650 ft

Burst

Max anticipated surface pressure: 371 psi  
 Internal gradient: 0.000 psi/ft  
 Calculated BHP 371 psi

No backup mud specified.

Tension:

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

Tension is based on air weight.  
 Neutral point: 570 ft

Non-directional string.

**Re subsequent strings:**

Next setting depth: 4,600 ft  
 Next mud weight: 8.600 ppg  
 Next setting BHP: 2,055 psi  
 Fracture mud wt: 11.000 ppg  
 Fracture depth: 650 ft  
 Injection pressure 371 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	650	13.375	48.00	H-40	ST&C	650	650	12.59	8061
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	284	740	2.61	371	1730	4.66	31.2	322	10.32 J

Prepared by: W.M. Frank  
 Devon Energy

Phone: (405) 552-4595  
 FAX: (405) 552-7813

Date: October 24, 2000  
 Oklahoma City, Oklahoma

Remarks:

Collapse is based on a vertical depth of 650 ft, a mud weight of 8.4 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:	<b>Maljimar 10 Fed. #1</b>
Operator:	<b>Devon Energy Production Company, L.P. DEVON SFS OPERATING, INC.</b>
String type:	Intermediate
Location:	Sec. 10, T17S, R32E, Lea County, NM

**Design parameters:**

Collapse

Mud weight: 8.800 ppg  
 Design is based on evacuated pipe.

**Minimum design factors:**

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

**Environment:**

H2S considered? No  
 Surface temperature: 75 °F  
 Bottom hole temperature: 112 °F  
 Temperature gradient: 0.80 °F/100ft  
 Minimum section length: 650 ft

Burst

Max anticipated surface pressure: 2,629 psi  
 Internal gradient: 0.000 psi/ft  
 Calculated BHP 2,629 psi

No backup mud specified.

Tension:

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

Tension is based on air weight.  
 Neutral point: 3,999 ft

Non-directional string.

**Re subsequent strings:**

Next setting depth: 12,674 ft  
 Next mud weight: 9.800 ppg  
 Next setting BHP: 6,452 psi  
 Fracture mud wt: 11.000 ppg  
 Fracture depth: 4,600 ft  
 Injection pressure 2,629 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	4600	8.625	32.00	J-55	LT&C	4600	4600	7.875	37070
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	2103	2530	1.20	2629	3930	1.50	147.2	417	2.83 J

Prepared by: W.M. Frank  
 Devon Energy

Phone: (405) 552-4595  
 FAX: (405) 552-7813

Date: October 24,2000  
 Oklahoma City, Oklahoma

Remarks:

Collapse is based on a vertical depth of 4600 ft, a mud weight of 8.8 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:	<b>Maljimar 10 Fed. #1</b>
Operator:	<del>Devon Energy Production Company, L.P.</del> DEVON SFS OPERATING, INC.
String type:	Production
Location:	Sec. 10, T17S, R32E, Lea County, NM

**Design parameters:**

Collapse

Mud weight: 7.600 ppg  
 Design is based on evacuated pipe.

**Minimum design factors:**

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

**Environment:**

H2S considered? No  
 Surface temperature: 75 °F  
 Bottom hole temperature: 253 °F  
 Temperature gradient: 1.40 °F/100ft  
 Minimum section length: 1,000 ft

Burst

Max anticipated surface pressure: 5,014 psi  
 Internal gradient: 0.000 psi/ft  
 Calculated BHP 5,014 psi  
 Annular backup: 9.80 ppg

Tension:

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

Non-directional string.

Tension is based on air weight.  
 Neutral point: 11,236 ft

Estimated cost: 81,351 (\$)

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
2	2000	5.5	17.00	L-80	Buttress	2000	2000	4.767	13556
1	10700	5.5	17.00	L-80	LT&C	12700	12700	4.767	67795

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
2	790	4892	6.19	5014	7740	1.54	215.9	397	1.84 B
1	5014	6290	1.25	3996	7740	1.94	181.9	338	1.86 J

Prepared by: W.M. Frank  
 Devon Energy

Phone: (405) 552-4595  
 FAX: (405) 552-7813

Date: October 24,2000  
 Oklahoma City, Oklahoma

Remarks:

Collapse is based on a vertical depth of 12700 ft, a mud weight of 7.6 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

# DEVON ENERGY CORPORATION

## HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

### A. Hydrogen Sulfide Training

All rig crews and company personnel will receive training from a qualified instructor in the following areas prior to penetrating any hydrogen sulfide bearing formations during drilling operations:

1. The hazards and characteristics of hydrogen sulfide (H<sub>2</sub>S).
2. The proper use and maintenance of the H<sub>2</sub>S safety equipment and of personal protective equipment to be utilized at the location such as H<sub>2</sub>S detection monitors, alarms and warning systems, and breathing equipment. Briefing areas and evacuation procedures will also be discussed and established.
3. Proper rescue techniques and procedures will be discussed and established.

In addition to the above, supervisory personnel will be trained in the prevention of oil and gas well blowouts in accordance with Minerals Management Service Standards Subpart - 0 - 250 - 212.

Prior to penetrating any known H<sub>2</sub>S bearing formation, H<sub>2</sub>S training will be required at the rig sight for all rig crews and company personnel that have not previously received such training. This instruction will be provided by a qualified instructor with each individual being required to pass a 20 question test regarding H<sub>2</sub>S safety procedures. All contract personnel employed on an unscheduled basis will be required to have received appropriate H<sub>2</sub>S training.

This Hydrogen Sulfide Drilling And Operations Plan shall be available at the wellsite during drilling operations.

### B. H<sub>2</sub>S Safety Equipment And Systems

All H<sub>2</sub>S safety equipment and systems will be installed, tested, and operational when drilling operations reach a depth approximately 500' above any known or probable H<sub>2</sub>S bearing formation. The safety systems to be utilized during drilling operations are as follows:

### 1. Well Control Equipment

- (a) Double ram BOP with a properly sized closing unit and pipe rams to accommodate all pipe sizes in use.
- (b) A choke manifold with a minimum of one remote choke.

### 2. H2S Detection And Monitoring Equipment

- (a) Three (3) H2S detection monitors will be placed in service at the location. One monitor will be placed near the bell nipple on the rig floor; one will be placed at the rig substructure; and, one will be at the working mud pits or shale shaker. This monitoring system will have warning lights and audible alarms that will alert personnel when H2S levels reach 10 ppm.
- (b) One (1) Sensidyne Pump with the appropriate detection tubes will also be available to perform spot checks for H2S concentrations in any remote or isolated areas.

### 3. Protective Equipment For Essential Personnel

Protective equipment will consist of the following:

- (a) Four (4) - five minute escape packs located at strategic points around the rig.
- (b) Two (2) - thirty minute rescue packs to be located at the designated briefing areas.

### 4. Visual Warning System

Visual warning system will consist of the following:

- (a) Two wind direction indicators.
- (b) One condition / warning sign which will be posted on the road providing direct access to the location. The sign will contain lettering of sufficient size to be readable at a reasonable distance from the immediate location. The sign will inform the public that a hydrogen sulfide gas environment could be encountered at the location.

5. Mud Program

The mud program has been designed to minimize the volume of H<sub>2</sub>S circulated to surface. Proper mud weight and safe drilling practices (for example, keeping the hole filled during trips) will minimize hazards when drilling in H<sub>2</sub>S bearing formations.

6. Metallurgy

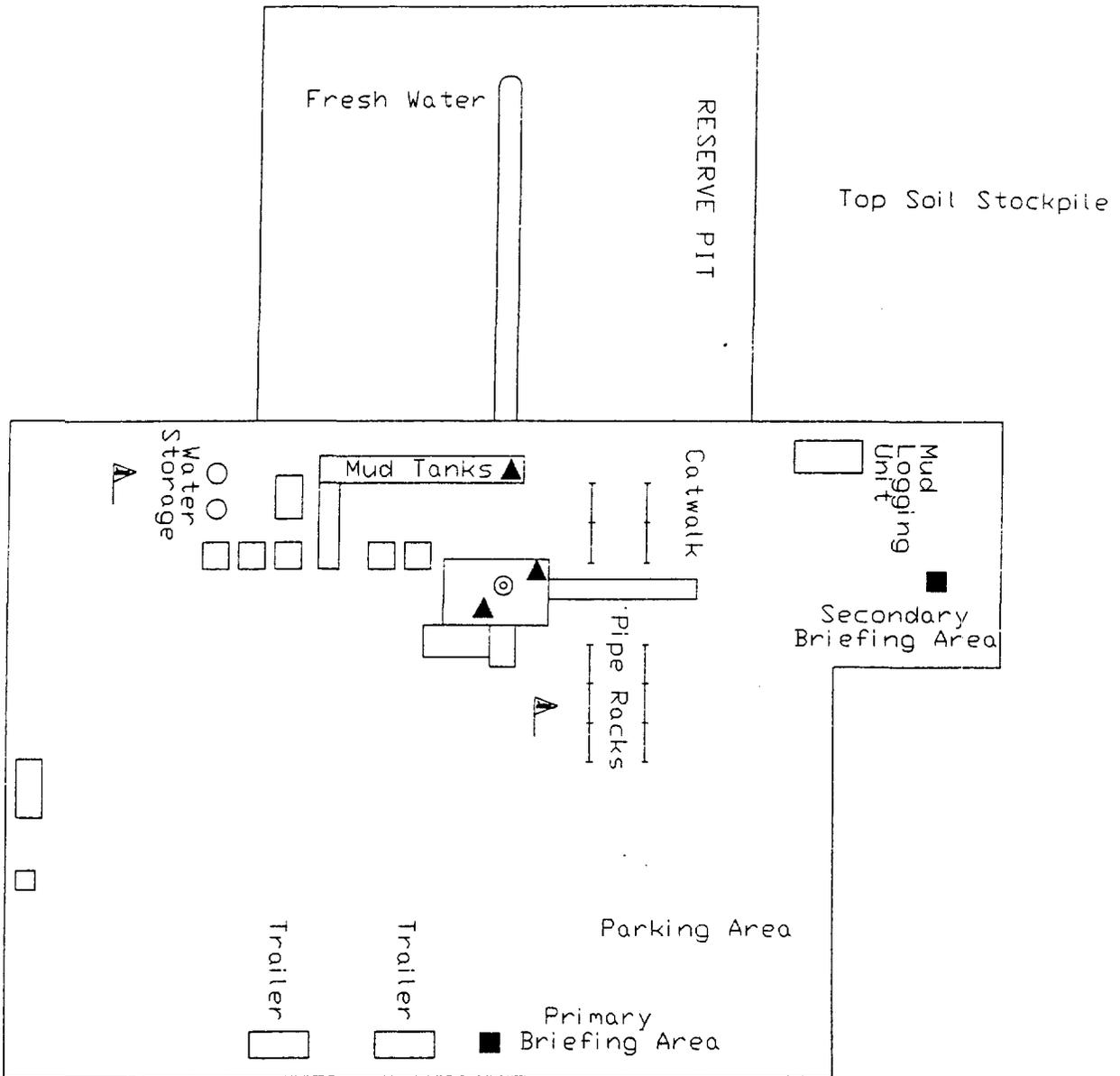
All drill strings, casings, tubing, wellhead, blowout preventers, drilling spools, kill lines, choke manifold and lines and valves shall be suitable for H<sub>2</sub>S service.

7. Communication

Cellular telephone communication will be available in company vehicles.

C. Diagram of Drilling Location

Attached is a diagram representing a typical location layout as well as the location of H<sub>2</sub>S monitors, briefing areas and wind direction indicators.



- ▲ H2S MONITORS WITH ALARMS AT THE BELL NIPPLE, SUBSTRUCTURE, AND SHALE SHAKER
- ▲ WIND DIRECTION INDICATORS
- SAFE BRIEFING AREAS WITH CAUTION SIGNS AND PROTECTIVE BREATHING EQUIPMENT



**devon**  
ENERGY SERVICES

---

EDDY COUNTY, NEW MEXICO

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**H2S PLAN**

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Scale in Feet

25    0    25    50    75    100

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4/97



SOUTHERN NEW MEXICO ARCHAEOLOGICAL SERVICES, INC.  
P.O. Box 1 Bent, New Mexico 88314 Office (505) 671-4797

October 23, 2000

Devon SFS Operating, Inc..  
Ms. Candi Graham  
20 North Broadway, Suite 1500  
Oklahoma City, Oklahoma 73102-8260

Dear Ms. Graham;

Enclosed is our cultural resource report for the following Devon SFS Operating, Inc. project:

The Maljamar "10" Federal Number 1  
Original and Proposed Alternate Well Location and Access Road  
Section 10, T.17S., R. 32E  
Eddy County, New Mexico SNMAS-00NM-410

A records check was completed at the Bureau of Land Management, Roswell District, Carlsbad Field Office, and the State of New Mexico Archaeological Records Management Section. The record check of T. 17S., R.32E., Section10, and within one mile revealed one previously recorded site LA 31793. During the current inventory, no new cultural resources were encountered, site LA 31793 was located on the north and east portion of the original well location. A new alternate well location was staked to avoid site LA 31793.

**Archaeological clearance is recommended for the proposed Maljamar 10" Federal Number 1 alternate well location and access road, located in Section 10, T. 17S., R.32E, with the following stipulations: The original well location is to be abandoned and the alternate well location used to avoid site LA 31793.**

If you have any questions regarding the report, please do not hesitate to contact me. Thank you.

Sincerely,

Doralene Sanders  
President and Office Manager

# CULTURAL RESOURCE MANAGEMENT REPORT

**Devon SFS Operating, Inc.  
The Maljamar "10" Federal Number 1  
Original and Proposed Alternate Well Location and Access Road  
Section 10, T.17S., R. 32E  
Lea County, New Mexico**

Written By:  
Doralene Sanders  
And  
Joe Ben Sanders  
Project Archaeologist  
Principal Investigator

Prepared For:  
**Devon SFS Operating, Inc.  
20 North Broadway, Suite 1500  
Oklahoma City, Oklahoma 73102-8260**

Prepared By:

**SOUTHERN NEW MEXICO  
ARCHAEOLOGICAL SERVICES, Inc.**

Post Office Box 1  
Bent, New Mexico 88314-0001

Date:  
October 21, 2000

**Project # SNMAS-00NM-410  
NMCRIS # 72115**

TITLE PAGE/ABSTRACT  
NEGATIVE SITE REPORT  
ROSWELL DISTRICT

BLM/ RDO 1/95

Page 1

1. BLM Report No.

2. (Accepted)  
(Rejected)

3. NMCRIS No. 72115

4. Title of Report ( Project Title ):

A Cultural Resource Inventory  
The Maljamar "10" Federal Number 1  
Original and Proposed Alternate Well Location  
And Access Road  
Section 10, T.17S., R. 32E  
Lea County, New Mexico

5. Project Date(s)

October 5, 11, 2000

6. Report Date

October 17 & 21, 2000

7. Consultant Name & Address:

Direct Charge: Joe Ben Sanders  
Name: Southern New Mexico Archaeological Services, Inc.  
Address: PO Box 1 Bent, New Mexico 88314  
Author's Name: Doralene Sanders  
Field Personnel Names: Don Clifton  
Phone No. (505) 671-4797

8. Permit No.

145-2920-00-G

Consultant Report #

SNMAS-00NM-410

10. SPONSOR NAME AND ADDRESS:

Individual Responsible: Candi Graham

Name: Devon SFS Operating, Inc.  
Address: 20 North Broadway, Suite 1500  
Oklahoma City, Oklahoma 73102-8260  
Phone No. (405) 235-3611

11. FOR BLM USE

12. ACREAGE:

Total No. of acres  
Surveyed 8.17

Per Surface

Ownership:

Federal 8.17

State

Private

13. Location and Area: (Maps Attached if negative survey)

a. State: New Mexico b. County: Eddy c. BLM District: Roswell, Field Office: Carlsbad.

d. Nearest City or Town: Maljamar, New Mexico

e. Location: T 17S R.32E Sec 10 Original Well Pad Footage's: 785' FSL and 1155' FEL

Alternate Well Pad Footage's : 660' FSL AND 1530' FEL

Well Pad ¼'s: SE¼SW¼NE¼

Access Road ¼'s: SE¼SW¼SE¼

f. 7.5' Map Name(s) and Code Number(s): USGS Maljamar NM (1985) 32103-G7 and USGS Dog Lake (1985) 32103-G6

g. Area: Block: Original and Alternate well location

Impact: 200' X 200'

Surveyed: 800' X 525'

Linear: 50' X 334'

Surveyed: 100' X 334'

14. a. **Records Search:**

<b>Location:</b>	ARMS HPD.	Date: October 4, 2000
	BLM Carlsbad	Date: October 5, 2000

List by LA # All sites within .25 miles of the project:  
LA 31793

b. **Description of Undertaking:**

The proposed Maljamar "10" Federal Number 1 alternate well location, is staked 660 ft FSL and 1530 ft FEL in Section 10, T.17S., R.32E. The impact area for the proposed well location is an area 200 ft by 200 ft. The proposed access road is 150 ft long with an impact area of 50 ft by 150 ft. The proposed access road begins on the southeast corner of the well location, and trends south 150 ft to county road 125. The original access road was 334 ft long; the well location now calls for approximately 150 ft of that access road to be used to access the well location. The well location may also be accessed from County Road 125 on the southwest corner of the well location.

The original Maljamar "10" Federal Number 1 well location was staked 785 ft FSL and 1155 ft FEL, in Section 10, T.17S., R.32E. The well location was moved, to avoid site LA 31793. Please see main report for specific details.

c. **Environmental Setting** NRCS soil designation: vegetative community: etc.:

The project area is located on a southwest sloping plain, with dunes to the east, and isolated coppice dunes. Soils are loose gray sands with caliche fragments. Vegetation consists of mesquite, shin oak, and various grasses. The elevation is 4108'.

d. **Field Methods: Transect Intervals:** 16 zig zag transects across well pad  
15 m intervals across the staked corridors.

**Crew Size:** 1

**Time in Field:** 10 hours

**Collections:** NONE

**15. Cultural Resource Findings:**

a. Identification and description: ( Location shown on project map )

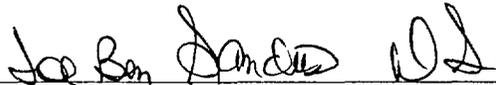
During the current survey, one previously recorded site LA 31793 was relocated and a site form update completed. The site is located approximately 250 ft to the north and to the east. An alternate well location has been staked and surveyed, in order to avoid the site. The site was mis-plotted on the BLM records check topo map; the site has been re-plotted to the correct legals and size. Please see main report for specific details.

**16. Management Summary (Recommendations):**

During the survey, one previously recorded site was relocated and a site form update completed. An alternate well location and access road was staked and surveyed, to avoid site LA 31793. Therefore, **archaeological clearance is recommended** for the Devon SFS Operating, Inc. proposed **Alternate Maljamar "10" Federal Number 1 well location and access road**, with the following stipulations: **The original well location staked 785 ft FSL and 1155 ft FEL is to be abandoned. The alternate well location staked 660 ft FSL and 1530 ft FEL is recommended to avoid site LA 31793.**

I certify the information provided above is correct and accurate and meets all appreciable BLM standards.

Responsible Archaeologist: Signature



Joe Ben Sanders

Date: October 21, 2000

Principal Investigator

The above completes a negative report. If eligible of potentially eligible properties are involved, then the above will be the title page and abstract for a complete report

The Proposed Maljamar "10" Federal Number 1  
Original and Alternate Well Location and Access Road  
Site LA 31793  
Section 10, T.17S., R.32E.  
Lea County, New Mexico

Written By:  
Doralene Sanders  
And  
Joe Ben Sanders  
Principal Investigator  
Project Archaeologist

Prepared For:

Devon SFS Operating, Inc.  
20 North Broadway, Suite 1500  
Okalahoma City, Oklahoma 73102-8260

Date  
October 21, 2000

NMCRIS # 72115  
Project # SNMAS-00NM-410  
Under provisions of BLM Antiquity  
Permit Number 145-2920-00-G

## **ABSTRACT**

On October 5 and October 11, 2000 Southern New Mexico Archaeological Services, Inc., performed a Class III Cultural Resource Inventory of the proposed Maljamar "10" Federal Number 1 original and alternate well location and access road, in Lea County, New Mexico. The cultural resource inventory revealed one previously recorded site, LA 31793, and no isolated occurrences. The original and the proposed alternate well location is located in Section 10, T.17S., R.32E. The work was conducted at the request of Devon SFS Operating, Inc., in compliance with BLM guidelines.

These impacts occur on lands administered by the U.S.D.I. Bureau of Land Management and the State Of New Mexico Land Office. The Class III cultural resource inventory was performed according to provisions of Cultural Resource Use Permit 145-2920-00-G, which expires June 30, 2001.

## INTRODUCTION

On October 5 and October 11, 2000, Don Clifton, of Southern New Mexico Archaeological Services, Inc., performed a Class III Cultural Resource Inventory of the proposed Maljamar "10" Federal Number 1 original and alternate well location and access road, in Lea County, New Mexico. The cultural resource inventory revealed one previously recorded site, LA 31793, which was located on the east and north portions of the well location. The original well location was staked 785 ft FSL and 1155 ft FEL, in Section 10, T.17S., R.32E. The proposed alternate well location is staked 660 ft FSL and 1530 ft FEL, in Section 10, T.17S., R.32E. The original access road was 334 ft long; with 150 ft of the original access road being used for the alternate well location, the access will have an impact area of 50 ft by 150 ft. The proposed alternate access road begins on the southeast corner of the well location and trends south 150 ft to County Road 125.

The proposed well location is located on USGS Maljamar, New Mexico topographic quadrangle maps, 7.5' series, 1985 (Figure 1).

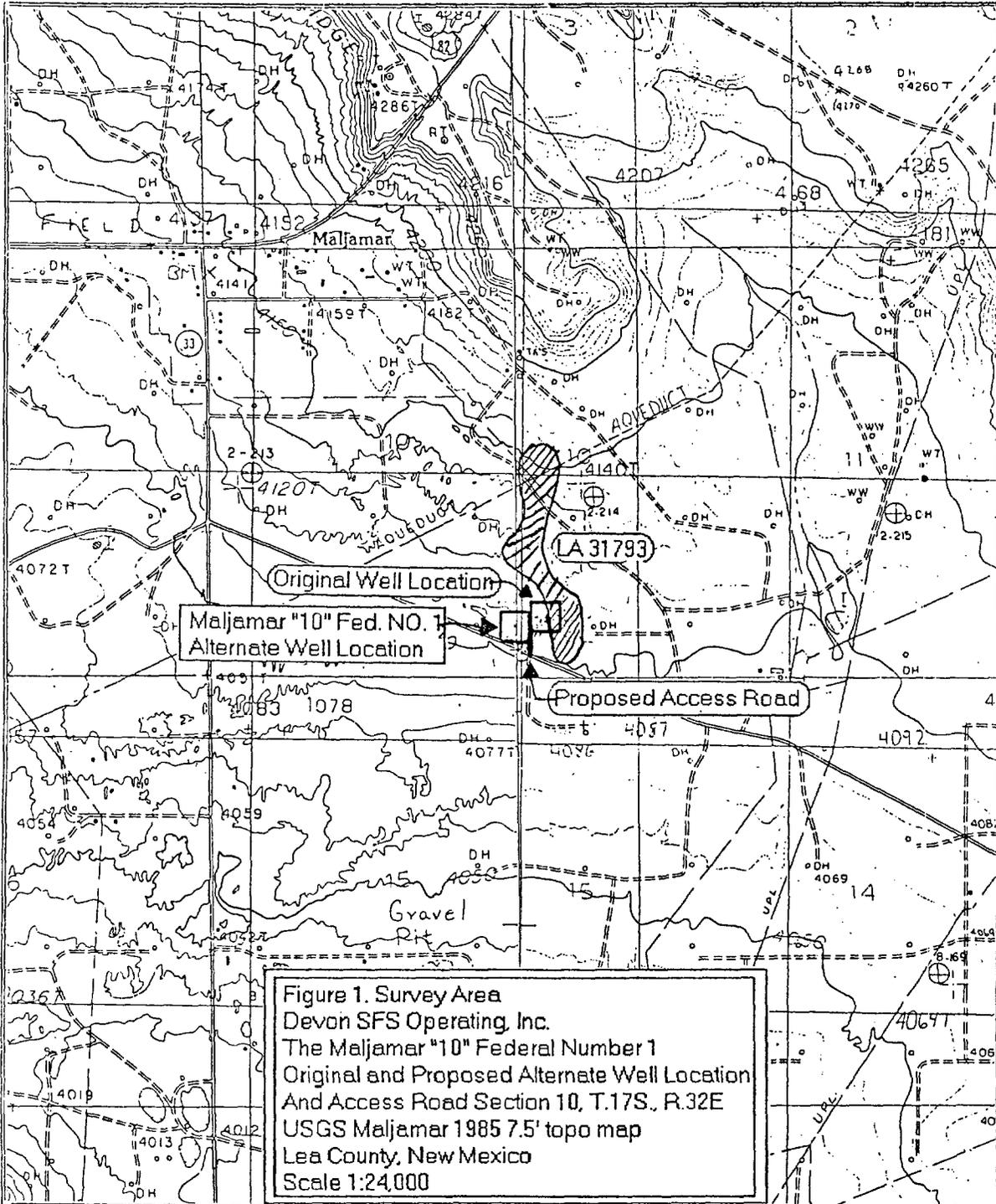
A project total of 8.17 acres was examined for cultural resources (Figure 1), for the proposed Maljamar "10" Fed. No. 1 original and alternate well location and the proposed access road. The original well location had an archaeological site LA 31793 discovered on the north and east portion of the well location. Site LA 31793 (Figure 2) was located and a site form update completed. The site was mis-plotted on the BLM records check topo; the site has been re-plotted to the correct legals and size. The well location was moved and re-staked to avoid the site.

Archaeologist Don Clifton, Project Director and field supervisor with Southern New Mexico Archaeological Services, Inc performed the fieldwork.

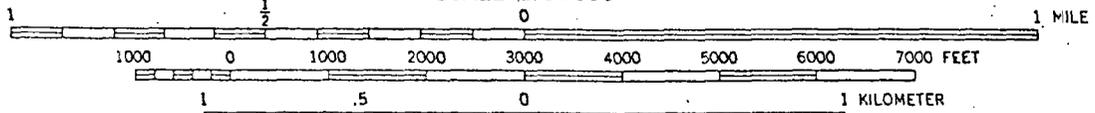
Archaeological **clearance is recommended** for the Devon SFS Operating, Inc. proposed Alternate Maljamar "10" Federal Number 1 well location and access road, **with the following stipulations: The original well location is to be abandoned and the alternate well location and access road used to avoid site LA 31793.**

## CULTURAL SETTING

The project falls within the Pecos Valley archaeological region as described by the Bureau of Land Management (Sebastian and Larralde 1989). Their cultural/temporal framework begins with the Paleoindian Period (ca. 11,700-7000 B.P.), Archaic (ca. 7000 B.P. - A.D. 900 or 1000), Ceramic (after ca. A.D. 600 - 1540), Protohistoric and Spanish Colonial (pre-A.D. 1400- 1821), and Mexican and American Historical (A.D. 1822 - early 1900s).



SCALE 1:24 000

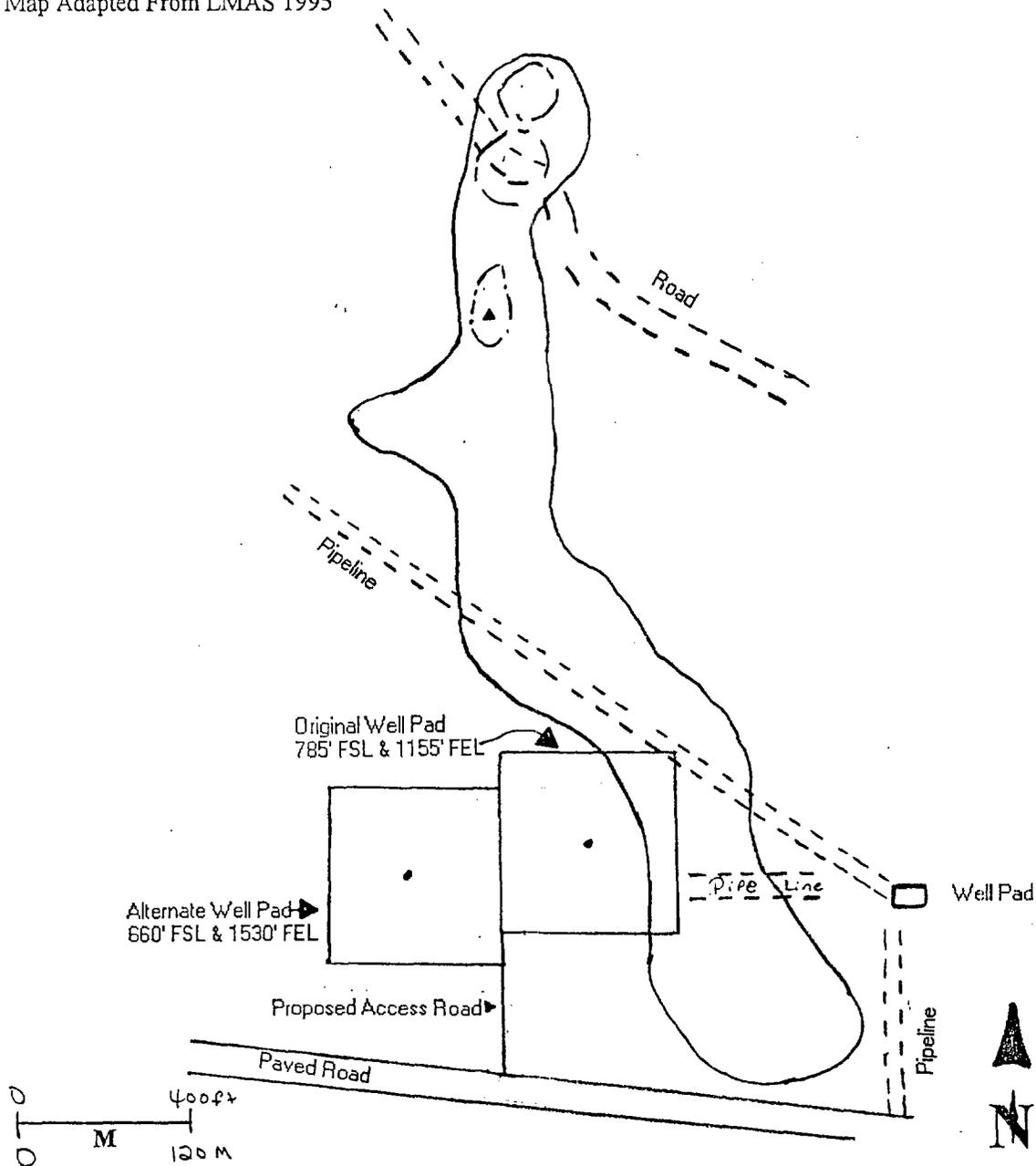


SNMAS  
INC



LA 31793  
MALJAMAR "10" FEDERAL NUMBER 1  
SNMAS-00NM-410-1  
FIGURE 2

Map Adapted From LMAS 1995



○ = Site Boundary    ▲ = Datum    ⊙ = Feature

*Southern New Mexico Archaeological Services, Inc.*

## **ENVIRONMENTAL SETTING**

The project area is located on a southwest sloping plain, with dunes to the east, and isolated coppice dunes. Soils are loose gray sands with caliche fragments. The vegetation in the area consists of mesquite, shin oak, and sparse grasses. The elevation ranges from 4108 ft to 4111 ft.

## **FIELD METHODS**

The Class III survey was performed by walking eight parallel transects over the well location. The surface was intensively examined for cultural resources. The weather was sunny and warm.

Prior to fieldwork a records check was completed at the Bureau of Land Management, Carlsbad Resource Area office and the Archaeological Records Management Section. The ARMS and BLM record check of Section 10, Township 17S, Range 32E revealed one previously recorded site, on or within one-quarter mile of the project area. One previously recorded site LA 31793 is located within the project area on the north and east portion of the original well location.

### **Site LA 31793**

Site LA 31793 (SNMAS 410-1) was updated and combined with site LA 59990 by Lone Mountain Archaeological Services in 1995. The site is considered eligible to the National Register as a category 2 site, and should be avoided. There has been no change to the site since last recorded and updated by LMAS, in 1995.

Site LA 31793 has a continuous distribution of artifacts and burned caliche, numerous areas have features of clustered burned caliche, with burned caliche protruding out of the sides of dunes. Ash is visible on the surface, and in areas of burned caliche. The site has been previously damaged by construction of well locations and a pipeline. Although the site has disturbed areas from construction, the site still has high potential for buried cultural deposits, and is to be avoided.

The site was mis-plotted on the BLM records check topo; the site has been re-plotted to the correct legals and size.

### **Isolates**

During the current surveys no isolated occurrences were encountered.

## RESULTS

During the current work, one previously recorded site, LA 31793, was relocated, revisited and a site form update completed. The original well location staked 785 ft FSL and 1155 ft FEL was abandoned and an alternate location staked at 660 ft FSL and 1530 ft FEL to avoid site LA 31793.

## RECOMMENDATIONS

Archaeological **clearance is recommended** for the Devon SFS Operating, Inc. Maljamar "10" Federal Number 1 proposed alternate well location and access road, **with the following stipulations: The original well location is to be abandoned and the alternate well location and access road used to avoid site LA 31793.**

## REFERENCES CITED

Chugg, J. C., G. W. Anderson, D. L. King, and L. Jones  
1971 Soil Survey Eddy County, New Mexico. United States Department  
of Agriculture, Soil Conservation Service.

Williams, Jerry L.(editor)  
1986 New Mexico in Maps. 2nd ed. The University of New Mexico  
Press, Albuquerque



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office  
P.O. Box 45155  
Salt Lake City, UT 84145-0155

IN REPLY REFER TO

OCT 16 2000

3104  
(UT-932)

### DECISION

Principal:	:	Type of Bond:	Nationwide Oil and Gas
Devon SFS Operating, Inc.	:		
20 N. Broadway, Suite 1500	:	Bond Amount:	\$200,000
Oklahoma City, OK 73102	:		
	:	Bond Surety No.:	71S100753026-113
Surety:	:		
Travelers Casualty and Surety Company of	:	BLM Bond No.:	UT1195
America	:		
One Tower Square	:		
Hartford, CT 06183-6014	:		

Nationwide Oil and Gas Bond  
Rider Accepted  
Period of Liability of Previous Bond Terminated

On October 3, 2000, this office received a \$200,000 nationwide oil and gas bond for the principal named above. A rider was also filed assuming liabilities of the previous bond held by Santa Fe Snyder Corporation, with St. Paul Fire & Marine Insurance Company, as surety. The bond has been examined, found satisfactory, and is accepted effective October 3, 2000, the date of filing.

The bond will be maintained by this office and constitutes coverage of all operations conducted by the obligor on all Federal oil and gas leases except those in the National Petroleum Reserve in Alaska (NPR-A). The bond provides coverage of the obligor where the obligor has interest in, and/or responsibility for operations on, leases issued under the authority of any of the Acts cited on the bond form. Please note that Federal leases do not include Indian leases.

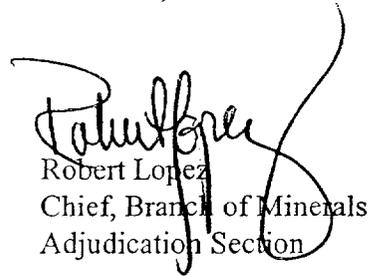
Together with the bond, and assumption rider, this bond assumes any and all liabilities which may be outstanding on the previous bond, No. 400JF 5433 (BLM Bond No. UT0855). The bond and assumption rider extend coverage of the geothermal resources exploration operations, which was included on the previous bond. Coverage of the geothermal exploration increases the bond amount to \$200,000. The bond rider has been examined, found satisfactory, and is accepted effective October 3, 2000.

RECEIVED

OCT 20 2000

LAND DEPARTMENT

With the acceptance of this bond and bond rider, the period of liability of Bond No.400JF 5433 (BLM Bond No. UT0855) is hereby terminated as of October 3, 2000.



Robert Lopez  
Chief, Branch of Minerals  
Adjudication Section

cc: St. Paul Fire & Marine Insurance Company  
385 Washington Street  
St. Paul, MN 55102