

133938192

NSL

12/23/01



J.D. MURCHISON INTERESTS, INC.

November 30, 2001

MURCHISON OIL &amp; GAS, INC.

MURCHISON PROPERTIES, INC.

Mr. Michael Stogner  
 State of New Mexico  
 Energy, Minerals and Natural Resources  
 Oil Conservation Division  
 2040 South Pacheco  
 Santa Fe, NM. 87505

DEC - 3 2001

**RE: UNORTHODOX LOCATION EXCEPTION  
 NASH UNIT #52  
 SURFACE: 1628' FSL & 2150' FWL, SEC. 12, T23S, R29E  
 BHL @ TD: 838' FNL & 1958' FWL, UNIT C, SEC. 12, T23S, R29E  
 BHL @ ATOKA: 12956' 1045' FNL & 2015' FWL  
 EDDY CO., NM.**

Dear Mr. Stogner:

The referenced well was directionally drilled to the Morrow formation. The bottom hole location at Morrow depth was orthodox. However the Morrow completion was unsuccessful and the well has been completed in the Atoka formation as shown on the attached BLM Form 3160-4 completion report, but bottom hole location at the Atoka depths is unorthodox by virtue of Order R-11231. The BHL is more than 660' from all the outer boundaries of the Proration Unit so a list of offset operators has not been submitted.

For your convenience a copy of the survey plat, NM-Form C-102, the Sundry Notice Form 3160-5 for completion, and a plat of the Nash Unit have also been attached. This letter serves to request that an exception to the wells BHL location requirements of Rule 104 C (2) (b) be granted in view of these circumstances. Please contact me if you should have questions.

Sincerely,

**MURCHISON OIL & GAS, INC.**

Michael S. Daugherty  
 Vice President Operations

MSD/ct/Nash#52-UnorthLocExc.

Encl.

cc: Mr. Bryan Arrant-St. of New Mexico  
 Oil Conservation Division - District II  
 811 S. 1<sup>st</sup> Street  
 Artesia, NM. 88210-2834

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88211-0719

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

DISTRICT IV  
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised February 10, 1994  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
		NASH DRAW MORROW
Property Code	Property Name	Well Number
	NASH	52
OGRID No.	Operator Name	Elevation
015363	MURCHISON OIL & GAS, INC.	2985

Surface Location

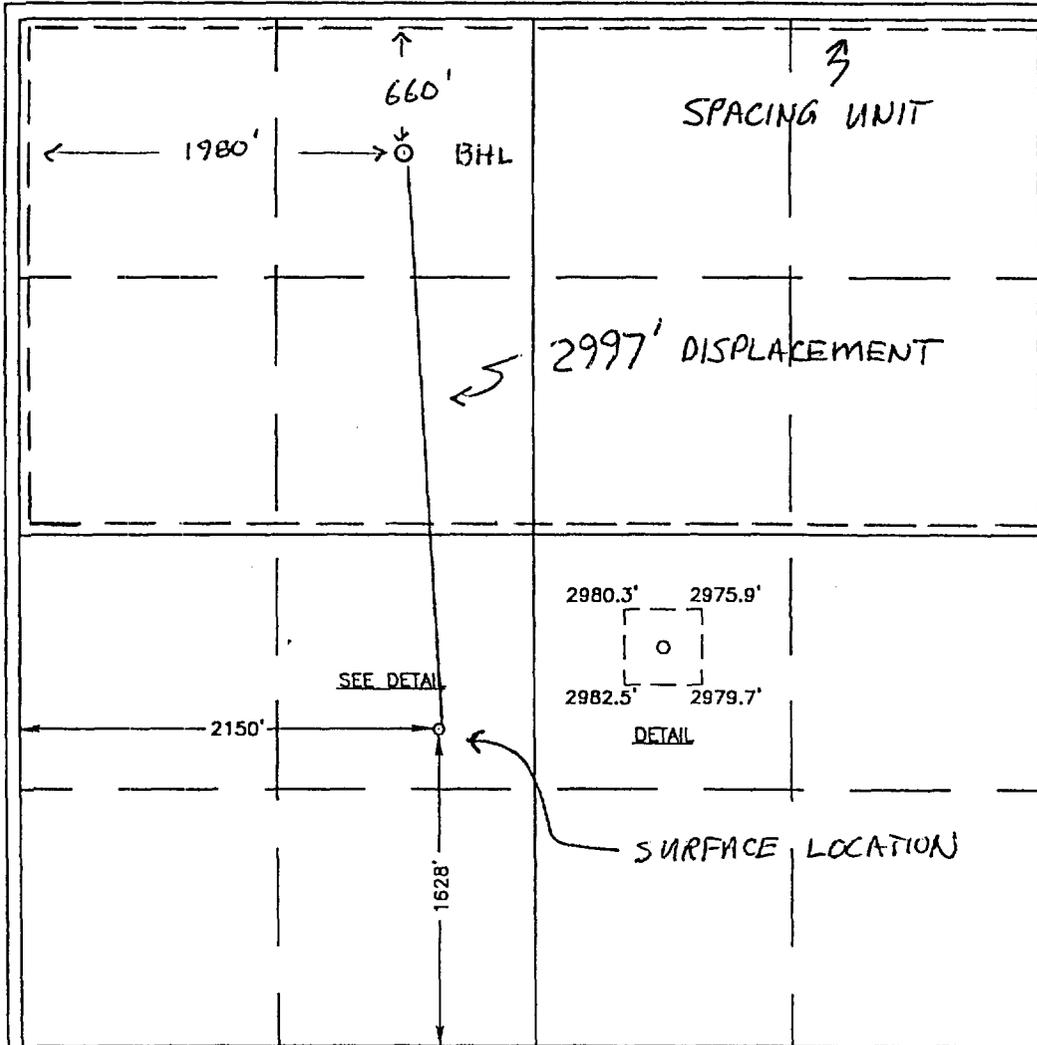
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	12	23 S	29 E		1628	SOUTH	2150	WEST	EDDY

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
C	12	23 S	29 E		660	NORTH	1980	WEST	EDDY

Dedicated Acres	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



**OPERATOR CERTIFICATION**  
I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.  
*Michael S. Daugherty*  
Signature  
MICHAEL S. DAUGHERTY  
Printed Name  
VICE PRESIDENT OPERATIONS  
Title  
7/21/00  
Date

**SURVEYOR CERTIFICATION**  
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.  
JUNE 26, 2000  
Date Surveyed LMP  
Signature & Seal of Professional Surveyor  
*Ronald G. Eidson*  
NEW MEXICO  
00-11-0775  
Certificate No. RONALD G. EIDSON 3239  
CARY EIDSON 12641  
MADONALD 12185

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE  
**OPERATOR COPY**

FORM APPROVED  
OMB NO. 1004-0137  
Expires: February 28, 1995

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG \***

1a. TYPE OF WELL: OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> DRY <input type="checkbox"/> Other _____		5. LEASE DESIGNATION AND SERIAL NO. NM 0556859-A	
b. TYPE OF COMPLETION: NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. REVR. <input type="checkbox"/> Other _____		6. IF INDIAN, ALIOTTEE OR TRIBE NAME	
2. NAME OF OPERATOR MURCHILSON OIL & GAS, INC.		7. UNIT AGREEMENT NAME NASH UNIT 8131	
3. ADDRESS AND TELEPHONE NO. 1100 MIRA VISTA BLVD. PLANO, TX. 75093-4698		8. FARM OR LEASE NAME, WELL NO. NASH UNIT #52	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface 1628' FSL & 2150' FWL SEC 12 T23S R29E At top prod. interval reported below ATOKA @ 12956' 1045' FNL & 2015' FWL At total depth 838' FNL & 1958' FWL		9. API WELL NO. 30-015-31510 <b>0051</b>	
14. PERMIT NO.		DATE ISSUED 12/5/00	
15. DATE SPUNNER		16. DATE T.D. REACHED	
17. DATE COMPL. (Ready to prod.)		18. ELEVATIONS (DF, RKB, RT, OR, ETC.)*	
19. ELEV. CASINGHEAD		20. TOTAL DEPTH, MD & TVD	
21. PLUG BACK T.D., MD & TVD		22. IF MULTIPLE COMPL., HOW MANY*	
23. INTERVALS DRILLED BY		ROTARY TOOLS	
24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*		25. WAS DIRECTIONAL SURVEY MADE	
26. TYPE ELECTRIC AND OTHER LOGS RUN		27. WAS WELL CORRED	

28. CASING RECORD (Report all strings set in well)

CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLES SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
13-3/8 N-80	72 #/FT	390'	17-1/2"	355 SXS CIRC CEMENT TO SURF	N/A
10-3/4 N-80J	55K55 44.22#/FT	3120'	12-1/4"	1010 SXS CIRC CEMENT TO SURF	N/A
7-5/8 N-80P1	10 39&33.7#/FT	10830'	9-7/8"	2460 SXS TOC @ 3172'	N/A

29. LINER RECORD					30. TUBING RECORD		
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
5-1/2"	10486'	14437'	416 SXS		2 7/8"	12837' MD	12797'

31. PERFORATION RECORD (Interval, size and number)			32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
13045-61	16'	32 HOLES	DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
12956-69	13'	78 HOLES	12956-13061	ACIDIZE W/ 4000 GAL 7.5% & 30% METHANOL

33. PRODUCTION

DATE FIRST PRODUCTION 9/6/01	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) FLOWING	WELL STATUS (Producing or shut-in) SI					
DATE OF TEST 9/6/01	HOURS TESTED 18 HRS	CHOKER SIZE 20/64	PROD'N. FOR TEST PERIOD →	OIL—BBL. 0	GAS—MCF. 1500	WATER—BBL. 0	GAS-OIL RATIO 0
FLOW. TUBING PRSS. 800 PSI	CASING PRESSURE 0	CALCULATED 24-HOUR RATE →	OIL—BBL. 0	GAS—MCF. 2000	WATER—BBL. 0	OIL GRAVITY-API (CORR.) N/A	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)  
FLARED

TEST WITNESSED BY  
TOMMY FOLSOM

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED *Michael R. Dougherty* TITLE *V. P. OPERATIONS* DATE *11/1/01*  
DAVID R. GLASS  
PETROLEUM ENGINEER

ACCEPTED FOR RECORD  
*David R. Glass*  
NOV 6 2001

\*(See Instructions and Spaces for Additional Data on Reverse Side)

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP	
					MEAS. DEPTH	TRUE VERT. DEPTH
ATOKA SAND	13956	13969	SAND & SHALE	DELAWARE	3153	3152
ATOKA SAND	13045	13061	LIMESTONE	BONE SPRING	6883	6882
MIDDLE MORROW	13905	13930	SAND SHALE	WOLFCAMP	10532	10146
LOWR MORROW	14286	14310	SAND SHALE	STRAWN	12626	12002
				<del>ATOKA</del>	12762	12116
				MORROW	13594	12904

38. GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH
DELAWARE	3153	3152
BONE SPRING	6883	6882
WOLFCAMP	10532	10146
STRAWN	12626	12002
<del>ATOKA</del>	12762	12116
MORROW	13594	12904

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0135  
Expires July 31, 1996

**OPERATOR'S COPY**

**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.*

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

1. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator  
 MURCHISON OIL & GAS, INC.

3a. Address 1100 MIRA VISTA BLVD.  
 PLANO, TX. 75093-4698

3b. Phone No. (include area code)  
 (972) 931-0700

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
 SURFACE: 1628 FSL & 2150 FWL UNIT K SEC 12 T23S R29E  
 BHL: 660 FNL & 1980 FWL UNIT C SEC 12 T23S R29E

5. Lease Serial No.  
 NM 0556859-A

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.  
 NASH UNIT 8131

8. Well Name and No.  
 NASH UNIT #52

9. API Well No.  
 30-015-31510

10. Field and Pool, or Exploratory Area  
 NASH DRAW MORROW

11. County or Parish, State  
 EDDY COUNTY, 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 checked="" 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>PERFORATE</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<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 and 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.)

PBTD @ 14215'. Run in hole with casing gun and perforate 13045-061' w/ 32 holes. TIH w/ 414 Jts. 2 7/8" 6.5 P110 Hydrill tubing and Arrow packer to 12797'. Set packer @ 12797' w/ bottom tubing @ 12837'. Flow well. Acidize w/ 2500 15% HCL and 2000 SCF N2. Flow well back. 18 HR SITP 1600 PSI. Kill well and perforate with a through tubing gun 12969-56' w/ 6 shot/ft. 78 holes. Acidize both intervals w/ 4000 gas 7.5% Morrow Acid and 14900 SCF. Flow well back and clean up. Flow over night. Flow after 18 HRS. 2000 MCFD on 20/64 CK @ 800 PSI. Shut well in and wait on BLM approval for pipeline to connect to sales. Well shut in on 9/6/01.

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed) MICHAEL S. DAUGHERTY	Title VICE PRESIDENT OPERATIONS
Signature <i>Michael Daugherty</i>	Date 10/31/01

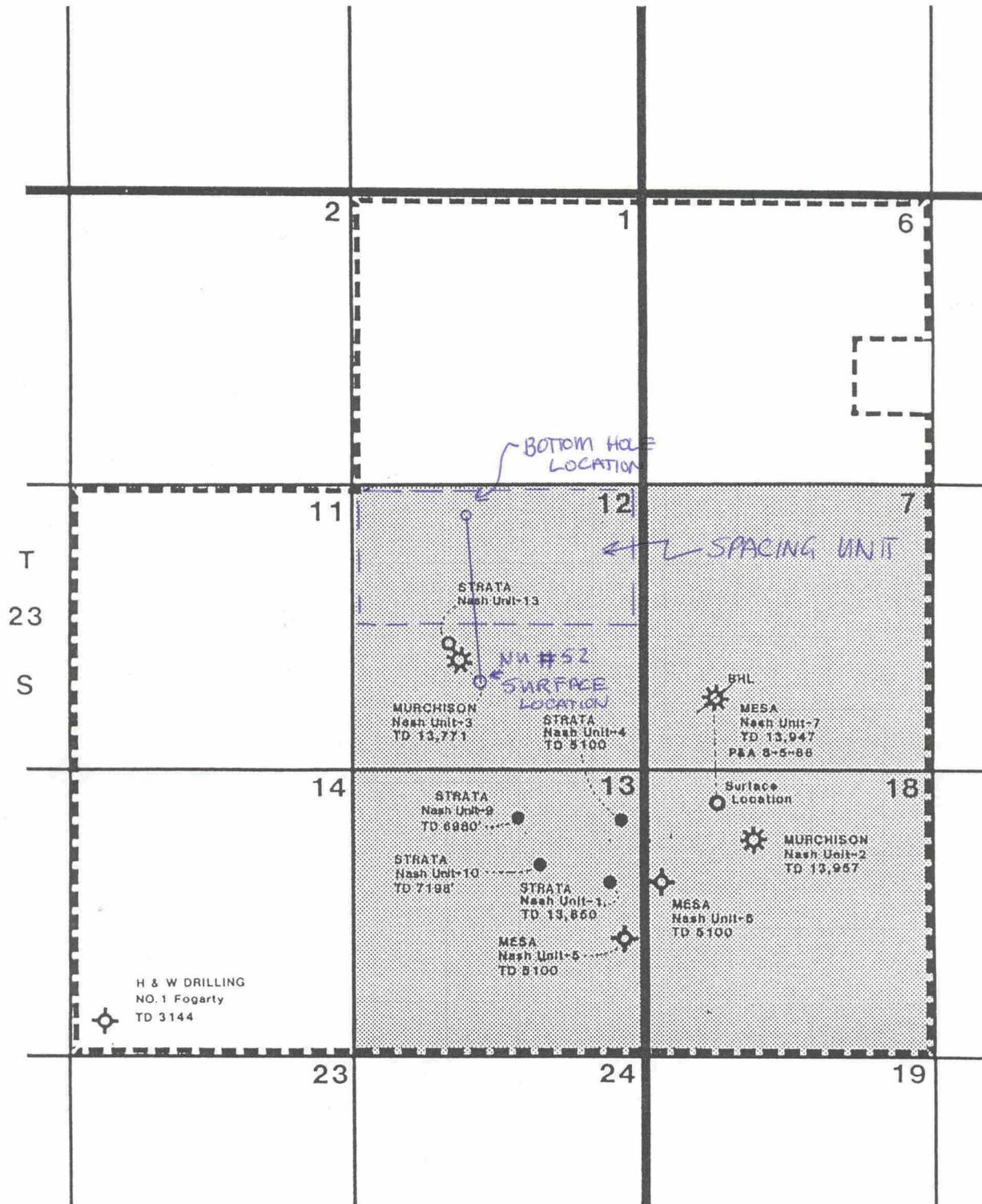
THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by	Title <i>David R. Glass</i>
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 NOV 6 2001

DAVID R. GLASS  
PETROLEUM ENGINEER

R-29-E

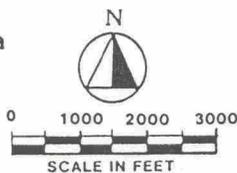
R-30-E



T  
23  
S

LEGEND

- Nash Unit Outline
- ▨ Atoka Participating Area



MURCHISON OIL & GAS, INC.

NASH UNIT  
EDDY COUNTY, NEW MEXICO

Atoka Participating Area

Date:

Scale 1" = 2000'



COUNTY *Eddy*

POOL *Nash Draw - Atoka Gas*

TOWNSHIP *23 South*

RANGE *30 East*

NMPM

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Description:  $\frac{N}{2}$  Sec 18 (R-5252, 9-1-76)

CMD :  
OG5SECT

ONGARD  
INQUIRE LAND BY SECTION

01/03/02 08:58:  
OGOMES -TP  
PAGE NO:

Sec : 12 Twp : 23S Rng : 29E Section Type : NORMAL

<p>D 40.00</p> <p>Federal owned U R A</p>	<p>C 40.00</p> <p>Federal owned U R A</p>	<p>B 40.00</p> <p>Federal owned U R</p>	<p>A 40.00</p> <p>Federal owned U R</p>
<p>E 40.00</p> <p>Federal owned U R A</p>	<p>F 40.00</p> <p>Federal owned U R</p>	<p>G 40.00</p> <p>Federal owned U R</p>	<p>H 40.00</p> <p>Federal owned U R</p>

PF01 HELP    PF02            PF03 EXIT    PF04 GoTo    PF05            PF06  
PF07 BKWD   PF08 FWD      PF09 PRINT   PF10 SDIV     PF11            PF12

CMD :  
OG5SECT

ONGARD  
INQUIRE LAND BY SECTION

01/03/02 08:58:  
OGOMES -TP  
PAGE NO:

Sec : 12 Twp : 23S Rng : 29E Section Type : NORMAL

<p>L 40.00</p> <p>Federal owned U R</p>	<p>K 40.00</p> <p>Federal owned U R A A A</p>	<p>J 40.00</p> <p>Federal owned U R A</p>	<p>I 40.00</p> <p>Federal owned U R</p>
<p>M 40.00</p> <p>Federal owned U R</p>	<p>N 40.00</p> <p>Federal owned U R A</p>	<p>O 40.00</p> <p>Federal owned U R A</p>	<p>P 40.00</p> <p>CS K06600 0001 MCELVAIN OIL &amp; U R 12/20/7 A</p>

PF01 HELP    PF02            PF03 EXIT    PF04 GoTo    PF05            PF06  
PF07 BKWD    PF08 FWD        PF09 PRINT    PF10 SDIV    PF11            PF12

CMD : ONGARD 01/03/02 08:58:  
OG6IWCM INQUIRE WELL COMPLETIONS OGOMES -TP

API Well No : 30 15 21781 Eff Date : 12-01-1976 WC Status : A  
Pool Idn : 81560 NASH DRAW;ATOKA (GAS)  
OGRID Idn : 15363 MURCHISON OIL & GAS INC  
Prop Idn : 8131 NASH UNIT

Well No : 003  
GL Elevation: 99999

	U/L	Sec	Township	Range	North/South	East/West	Prop/Act (P/
	---	---	-----	-----	-----	-----	-----
B.H. Locn	:	K 12	23S	29E	FTG 1980 F S	FTG 1980 F W	P

Lot Identifier:

Dedicated Acre: 320.00

Lease Type : F

Type of consolidation (Comm, Unit, Forced Pooling - C/U/F/O) :

M0025: Enter PF keys to scroll

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06
PF07	PF08	PF09	PF10 NEXT-WC	PF11 HISTORY	PF12 NXTREC

CMD : ONGARD 01/03/02 08:58:  
 OG6ACRE C102-DEDICATE ACREAGE OGOMES -TP  
 Page No :

API Well No : 30 15 21781 Eff Date : 04-30-1991  
 Pool Idn : 81560 NASH DRAW;ATOKA (GAS)  
 Prop Idn : 8131 NASH UNIT Well No : 00  
 Spacing Unit : 26969 OCD Order : Simultaneous Dedication:  
 Sect/Twp/Rng : Acreage : 320.00 Revised C102? (Y/N) :  
 Dedicated Land:

S	Base	U/L	Sec	Twp	Rng	Acreage	L/W	Ownership	Lot	Idn
			I	12	23S 29E	40.00	N	FD		
			J	12	23S 29E	40.00	N	FD		
			K	12	23S 29E	40.00	N	FD		
			L	12	23S 29E	40.00	N	FD		
			M	12	23S 29E	40.00	N	FD		
			N	12	23S 29E	40.00	N	FD		
			O	12	23S 29E	40.00	N	FD		
			P	12	23S 29E	40.00	N	ST		

E0005: Enter data to modify or PF keys to scroll

PF01 HELP PF02 PF03 EXIT PF04 GoTo PF05 PF06 CONFIRM  
 PF07 BKWD PF08 FWD PF09 PF10 LAND PF11 NXTSEC PF12 RECONF

CMD :  
OG6IWCM

ONGARD  
INQUIRE WELL COMPLETIONS

01/03/02 08:59:  
OGOMES -TP

API Well No : 30 15 31510 Eff Date : 09-06-2001 WC Status : S  
Pool Idn : 81560 NASH DRAW;ATOKA (GAS)  
OGRID Idn : 15363 MURCHISON OIL & GAS INC  
Prop Idn : 8131 NASH UNIT

Well No : 052  
GL Elevation: 2985

	U/L	Sec	Township	Range	North/South	East/West	Prop/Act (P/
	---	---	-----	-----	-----	-----	-----
B.H. Locn	: C	12	23S	29E	FTG 1628 F S	FTG 2150 F W	P

Lot Identifier:

Dedicated Acre: 320.00

Lease Type : F

Type of consolidation (Comm, Unit, Forced Pooling - C/U/F/O) :

E6317: No more recs. for this api well no.

PF01 HELP      PF02              PF03 EXIT      PF04 GoTo      PF05              PF06  
PF07              PF08              PF09              PF10 NEXT-WC   PF11 HISTORY   PF12 NXTREC

CMD : ONGARD 01/03/02 09:00:  
OG6ACRE C102-DEDICATE ACREAGE OGOMES -TP  
Page No :

API Well No : 30 15 31510 Eff Date : 09-06-2001  
Pool Idn : 81560 NASH DRAW;ATOKA (GAS)  
Prop Idn : 8131 NASH UNIT Well No : 05  
Spacing Unit : 55377 OCD Order : Simultaneous Dedication:  
Sect/Twp/Rng : Acreage : 320.00 Revised C102? (Y/N) :  
Dedicated Land:

---

S	Base	U/L	Sec	Twp	Rng	Acreage	L/W	Ownership	Lot	Idn
	A		12	23S	29E	40.00	N	FD		
	B		12	23S	29E	40.00	N	FD		
	C		12	23S	29E	40.00	N	FD		
	D		12	23S	29E	40.00	N	FD		
	E		12	23S	29E	40.00	N	FD		
	F		12	23S	29E	40.00	N	FD		
	G		12	23S	29E	40.00	N	FD		
	H		12	23S	29E	40.00	N	FD		

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E0005: Enter data to modify or PF keys to scroll

PF01 HELP      PF02              PF03 EXIT      PF04 GoTo      PF05              PF06 CONFIRM  
PF07 BKWD      PF08 FWD          PF09              PF10 LAND      PF11 NXTSEC      PF12 RECONF

NASH UNIT AREA

No. 14-08-0001-14168

APPROVED: July 25, 1974

EFFECTIVE: July 25, 1974

EXPLORATORY

Eddy County, New Mexico


**gulram, inc.**  
 petroleum engineering and government regulation consultants



Federal Lands	4,842.40 acres
State Lands	240.46 acres
Fee Lands	<u>40.00</u> acres
Total	5,122.86 acres

 - Lands subject to Automatic Elimination January 25, 1985 (not officially approved)

Remaining Unit Land - Federal	2,320.86 acres
State	<u>240.46</u> acres
Total	2,561.32 acres

Unit Name: Nash  
Contract Number: 14-08-0001-14168  
Automatic Elimination Date: January 25, 1985 (not approved officially)  
Operator: Mesa Petroleum Company

PARTICIPATING AREAS (PA)

Name: Initial Delaware (Cherry Canyon)

Well Name: Nash Unit No. 4

Location: NE $\frac{1}{4}$ NE $\frac{1}{4}$  Sec. 13, T. 23 S., R. 29 E.

Legal PA Description: NE $\frac{1}{4}$  Sec. 13, T. 23 S., R. 29 E.

Effective Date: June 22, 1976

PA Total Acres: 160.00



Unit Name: Nash

Contract Number: 14-08-0001-14168

Automatic Elimination Date: January 25, 1985 (not approved officially)

Operator: Mesa Petroleum Company

PARTICIPATING AREAS (PA)

Name: Initial Atoka

Well Name: Nash Unit No. 2

Location: SE $\frac{1}{4}$ NW $\frac{1}{4}$  Sec. 18, T. 23 S., R. 30 E.

Legal PA Description: Lots 1,2,3,4,E $\frac{1}{2}$ W $\frac{1}{2}$ , E $\frac{1}{2}$  Sec. 18, T. 23 S., R. 30 E.

Effective Date: April 21, 1976

PA Total Acres: 640.84

Name: 1st Revision Atoka

Well Name: Nash Unit No. 3

Location: NE $\frac{1}{4}$ SW $\frac{1}{4}$  Sec. 12, T. 23 S., R. 29 E.

Legal PA Description: All Sec. 12, All Sec. 13, T. 23 S., R. 29 E., Lots 1,2,3,4,  
E $\frac{1}{2}$ W $\frac{1}{2}$ , E $\frac{1}{2}$  Sec. 7, T. 23 S., R. 30 E. - 1920.48 acres

Effective Date: October 1, 1976

PA Total Acres: 2,561.32



Unit Name: Nash

Contract Number: 14-08-0001-14168

Automatic Elimination Date: January 25, 1985 (not approved officially)

Operator: Mesa Petroleum Company

PARTICIPATING AREAS (PA)

Name: Initial Morrow

Well Name: Nash Unit No. 1

Location: SE $\frac{1}{4}$ NE $\frac{1}{4}$  Sec. 13, T. 23 S., R. 29 E.

Legal PA Description: All Sec. 13, T. 23 S., R. 29 E., Lots 1,2,3,4, E $\frac{1}{2}$ W $\frac{1}{2}$ ,  
E $\frac{1}{2}$  Sec. 18, T. 23 S., R. 30 E.

Effective Date: January 22, 1975

PA Total Acres: 1,280.84

Name: 1st Revision Morrow

Well Name: Nash Unit No. 7

Location: SW $\frac{1}{4}$ SW $\frac{1}{4}$  Sec. 7, T. 23 S., R. 30 E.

Legal PA Description: Lots 1,2,3,4, E $\frac{1}{2}$ W $\frac{1}{2}$ , E $\frac{1}{2}$  Sec. 7, T. 23 S., R. 30 E. -  
640.48 acres

Effective Date: July 1, 1980

PA Total Acres: 1,921.32



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Oil Cons.  
N.M. Div-Dist. 2  
1301 W. Grand Avenue  
Artesia, NM 88210

APPROVED  
3. 1004-0135  
July 31, 1996

5F

**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.*

6556859-A

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.  
NASH UNIT 8131

8. Well Name and No.  
NASH UNIT #52

9. API Well No.  
30-015-31510

10. Field and Pool, or Exploratory Area  
NASH DRAW MORROW

11. County or Parish, State  
EDDY COUNTY, NM.

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

1. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator  
MURCHISON OIL & GAS, INC.

3a. Address 1100 MIRA VISTA BLVD.  
PLANO, TX. 75093-4698

3b. Phone No. (include area code)  
(972) 931-0700

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
SURFACE: 1628 FSL & 2150 FWL UNIT K SEC 12 T23S R29E  
BHL: 660 FNL & 1980 FWL UNIT C SEC 12 T23S R29E

**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 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>PIPELINE TAP</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

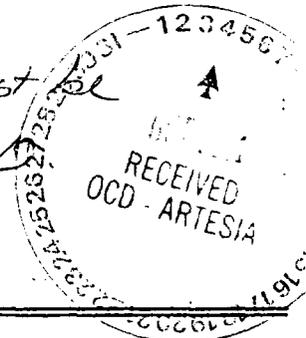
13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths 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.)

Murchison Oil & Gas proposes to allow Duke Energy Field Services to install one gas line tap, lay 4,287 feet of 4 inch steel extension line to the Nash Draw Unit #52 and set one sales meter at the wellpad. This installation is inside the Unit boundaries and along an existing right of way. The pipeline extension is a buried 4" low pressure line.

Attached are plats of the well location, meter locations and pipeline.

**APPROVED**  
SEP 25 2001  
GARY GOURLEY  
PETROLEUM ENGINEER

*Rescind - must be approved in CFO*



14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed) MICHAEL S. DAUGHERTY Title VICE PRESIDENT OPERATIONS

Signature *Michael S. Daugherty* Date 9/12/01

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

Approved by \_\_\_\_\_ 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 \_\_\_\_\_

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Oil Cons.

FORM APPROVED  
OMB No. 1004-0135  
Expires July 31, 1996

57

SUNDRY NOTICES AND REPORTS ON WELLS

N.M. Div-Dist. 2  
1301 W. Grand Avenue  
Artesia, NM 88210

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

Lease Serial No. NM 0556859-A

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.  
NASH UNIT 8131

8. Well Name and No.  
NASH UNIT #52

9. API Well No.  
30-015-31510

10. Field and Pool, or Exploratory Area  
NASH DRAW MORROW

11. County or Parish, State  
EDDY COUNTY, NM.

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

1. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator  
MURCHISON OIL & GAS, INC.

3a. Address 1100 MIRA VISTA BLVD.  
PLANO, TX. 75093-4698

3b. Phone No. (include area code)  
(972) 931-0700

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
SURFACE: 1628 FSL & 2150 FWL UNIT K SEC 12 T23S R29E  
BHL: 660 FNL & 1980 FWL UNIT C SEC 12 T23S R29E

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<input 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 PIPELINE TAP
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

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Attached are plats of the well location, meter locations and pipeline.

APPROVED  
SEP 25 2001

18 19 20 21 22 23 24 25 26 27 28 29 30 31  
SEP 25 2001  
RECEIVED  
OCD - ARTESIA

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

Signature *Michael S. Daugherty*

GARY GOURLEY  
PETROLEUM ENGINEER  
VICE PRESIDENT OPERATIONS

Date 9/12/01

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by \_\_\_\_\_ 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 \_\_\_\_\_

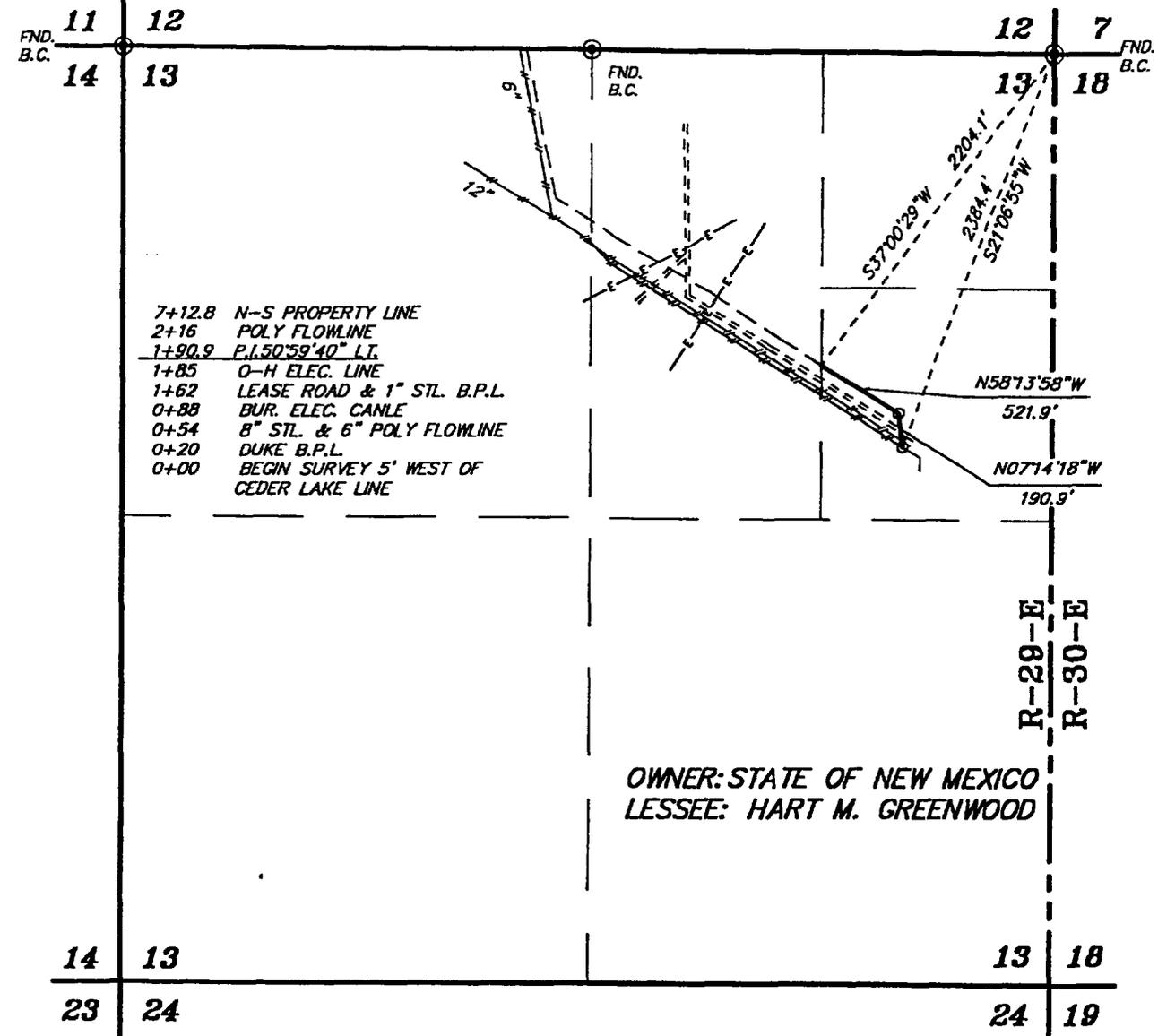
MURCHISON OIL & GAS INC., NASH UNIT #52

LINE No. \_\_\_\_\_

DISTRICT WEST PERMIAN PLANT OR STATION EAST CARLSBAD JOB OR AFE No. 100102236

SECTION 13 TOWNSHIP 23 S RANGE 29 E SURVEY N.M.P.M. COUNTY EDDY STATE N.M.

STUDY No. 2001ECB010



- 7+12.8 N-S PROPERTY LINE
- 2+16 POLY FLOWLINE
- 1+90.9 P.I. 50°59'40\" L.I.
- 1+85 O-H ELEC. LINE
- 1+62 LEASE ROAD & 1\" STL. B.P.L.
- 0+88 BUR. ELEC. CANLE
- 0+54 8\" STL. & 6\" POLY FLOWLINE
- 0+20 DUKE B.P.L.
- 0+00 BEGIN SURVEY 5' WEST OF CEDER LAKE LINE

OWNER: STATE OF NEW MEXICO  
 LESSEE: HART M. GREENWOOD

SCALE: 1" = 1000'

LEGAL DESCRIPTION

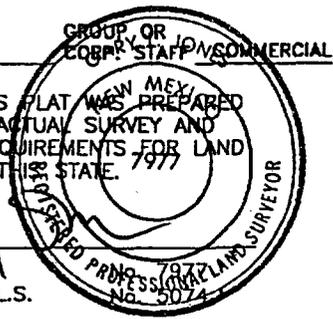
STAKING  RESURVEY

A STRIP OF LAND 30.0 FEET WIDE, LOCATED IN SECTION 13, TOWNSHIP 23 SOUTH, RANGE 29 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO AND BEING 15.0 FEET LEFT AND RIGHT OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY.

BEGINNING AT A POINT WHICH LIES S.21°06'55"W., 2384.4 FEET FROM THE NORTHEAST CORNER OF SAID SECTION 13; THENCE N.07°14'18"W., 190.9 FEET; THENCE N.58°13'58"W., 521.9 FEET TO A POINT ON THE WEST PROPERTY LINE WHICH LIES S.37°00'29"W., 2204.1 FEET FROM THE NORTHEAST CORNER OF SAID SECTION 13. SAID STRIP OF LAND BEING 712.8 FEET OR 43.20 RODS IN LENGTH AND CONTAINING 0.49 ACRES, MORE OR LESS, AND BEING ALLOCATED BY FORTIES AS FOLLOWS.

SE/4 NE/4 43.20 RODS OR 0.49 ACRES

SIGNED



I HEREBY CERTIFY THAT THIS PLAT WAS PREPARED FROM FIELD NOTES OF AN ACTUAL SURVEY AND MEETS OR EXCEEDS ALL REQUIREMENTS FOR LAND SURVEYS AS SPECIFIED BY THIS STATE.

PTRE&C No.: EDDY 2112

**BASIN SURVEYS**  
 P.O. BOX 1786 - HOBBS, NEW MEXICO  
 W.O. Number: 1757 JLP #1- DUK1757

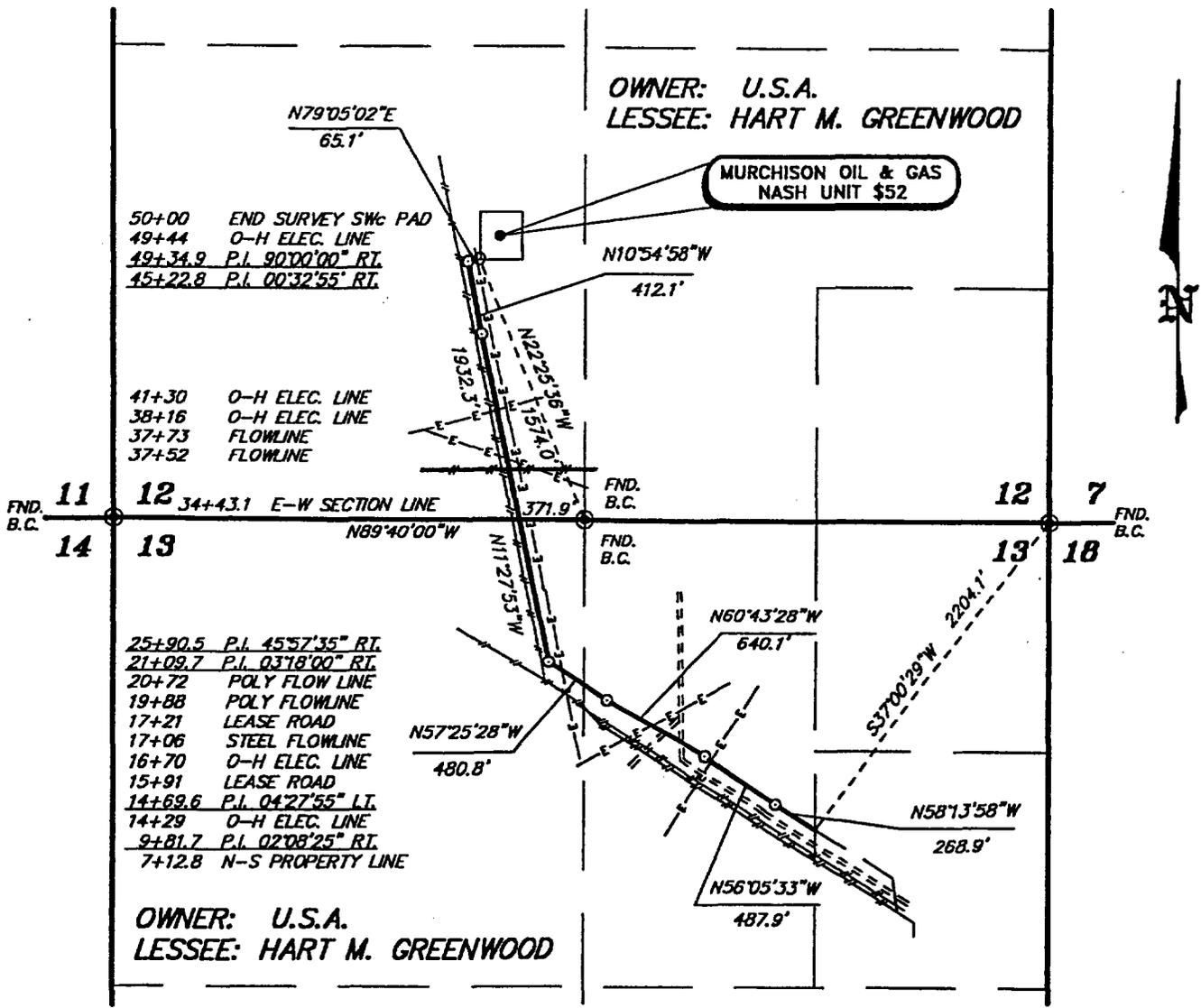
SEP 10 2001

OF WORK  
 SURVEY A 4"x0.188" STEEL PIPELINE TO CONNECT THE  
 MURCHISON OIL & GAS INC., NASH UNIT #52

DATE: 08/24/01

LINE No. \_\_\_\_\_

DISTRICT WEST PERMIAN PLANT OR STATION EAST CARLSBAD JOB OR AFE No. 100102236  
 SECTION 12&13 TOWNSHIP 23 S RANGE 29 E SURVEY N.M.P.M. COUNTY EDDY STATE N.M.  
 STUDY No. 2001ECB010



SCALE: 1" = 1000'

STAKING  RESURVEY

**LEGAL DESCRIPTION**

A STRIP OF LAND 50.0 FEET WIDE, LOCATED IN SECTION 12&13, TOWNSHIP 23 SOUTH, RANGE 29 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO AND BEING 25.0 FEET LEFT AND RIGHT OF THE ABOVE PLATTED CENTERLINE SURVEY.

4287.2 FEET = 259.83 RODS = 0.81 MILES

SIGNED   
 I HEREBY CERTIFY THAT THIS MAP WAS PREPARED FROM FIELD NOTES OF AN ACTUAL SURVEY AND MEETS OR EXCEEDS ALL REQUIREMENTS FOR LAND SURVEYS AS SPECIFIED BY THIS STATE.  
  
 GARY L. JONES N.M. P.S. No. 5074  
 TEXAS P.L.S. No. 5074

PTRE&C No.: EDDY 2112

**BASIN SURVEYS**  
 P.O. BOX 1786 - HOBBS, NEW MEXICO  
 W.O. Number: 1757 JLP #1- DUK1757

SEP 10 2001

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Oil Cons.  
N.M. DIV-Dist. 2  
1301 W. Grand Avenue  
Artesia, NM 88210  
Form No. 0556859-A  
FORM APPROVED  
OMB No. 1004-0135  
Expires July 31, 1996

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.

SUBMIT IN TRIPLICATE - Other Instructions on reverse side

1. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator  
MURCHISON OIL & GAS, INC.

3a. Address 1100 MIRA VISTA BLVD.  
PLANO, TX. 75093-4698

3b. Phone No. (include area code)  
(972) 931-8000

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
SURFACE: 1628 FSL & 2150 FWL UNIT K SEC 12 T23S R29E  
BHL: 660 FNL & 1980 FWL UNIT C SEC 12 T23S R29E

6. If Indian, Allottee or Tribe Name

7. If Unit or C/A Agreement, Name and/or No.  
NASH UNIT 8131

8. Well Name and No.  
NASH UNIT #52

9. API Well No.  
30-015-31510

10. Field and Pool, or Exploratory Area  
NASH DRAW MORROW

11. County or Parish, State  
EDDY COUNTY, 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 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>RUN CASING</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<u>AND CEMENT</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 thereon. If the proposal is to deepen directionally or recomplate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zone. 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 day following completion of the involved operations. If the operation results in a multiple completion or recomplate 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.)

Drill 9 7/8" hole to a measured depth of 10830' (TVD 10405'). POH with drill string. Pick up and run 281 jts. of 7 5/8" casing as follows:

BOTTOM:	104 JTS.	7 5/8"	39 #/FT	N-80	LT&C
	21 JTS.	7 5/8"	33.7 #/FT	N-80	LT&C
	DV TOOL	@ 6181'	FROM SURFACE		
	50 JTS.	7 5/8"	33.7 #/FT	N-80	LT&C
	106 JTS.	7 5/8"	33.7 #/FT	P-110	LT&C

Pump 890 SXS of 35:65 Class H + 5% D4 + 6% D20 + .3% D167 + .2% D65 + .2% D46 followed by 200 SXS Class H + .3% D167 + .1% D13. Drop DV Tool opening device and circulate between stages. Cement 2<sup>nd</sup> stage w/ 1270 SXS 35:65 Class H + 5% D4 + 6% D20 + .3% D167 + .2% D65 + .2% D46 followed by 100 SXS Class H Neat. Lost circulation on second stage. Run temperature survey and determined TOC @ 3172'. Nipple down stacks, set slips, cut off casing, nipple up tubing head and test to 6250 psi. Nipple up BOP, choke manifold, and change out BOP rams. Test BOP, choke manifold and safety valves to 10,000 PSI. WOC 36 Hrs. Drill out DV tool and float collar. Test casing to 2500 psi. Drill out shoe. Trip out with bit and pick up motor and MWD tools. Resume drilling 6 1/2" hole.

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed) MICHAEL S. DAUGHERTY Title VICE PRESIDENT OPERATIONS

Signature *Michael S. Daugherty* Date 7/30/01

APPROVED FOR RECORD

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by *David R. Glass* Title Office

DAVID R. GLASS

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Oil Cons.  
N.M. Div-Dist. 2  
1301 W. Grand Avenue  
Artesia, NM 88210  
FORM APPROVED  
OMB No. 1004-0135  
Expires July 31, 1996  
Case Serial No.  
56859-A

57

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.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator  
 MURCHISON OIL & GAS, INC.

3a. Address 1100 MIRA VISTA BLVD.  
 PLANO, TX. 75093-4698

3b. Phone No. (include area code)  
 (972) 988-4700

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
 SURFACE: 1628 FSL & 2150 FWL UNIT K SEC 12 T23S R29E  
 BHL: 660 FNL & 1980 FWL UNIT C SEC 12 T23S R29E

6. If Indian, Allottee or Tribe Name

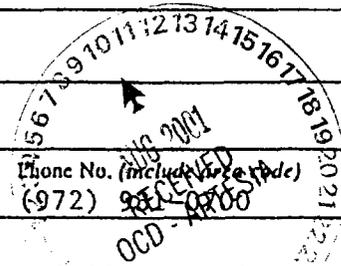
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 NASH UNIT #52

9. API Well No.  
 30-015-31510

10. Field and Pool, or Exploratory Area  
 NASH DRAW MORROW

11. County or Parish, State  
 EDDY COUNTY, 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 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>RUN LINER</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<u>AND CEMENT</u>
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

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Drill 6 1/2" hole to a measured depth of 14,432' (TVD of 13,737'). Bottom hole location is 838' FNL and 1958' FWL, Sec. 12, T23S, R29E. POH with drill string and run 5 1/2" liner as follows:

				Length	Measured Depth
BOTTOM:					14,437
	1 JT	Float shoe		3'	14,434
		23 #/FT	P-110	38'	14,396
		FL4S		1'	14,395
	1 JT	Float collar		39'	14,356
		23 #/FT	P-110	1'	14,355
		Landing collar		3843'	10,512
	101 JT	23 #/FT	P-110	26'	10,486
TOP:	1	Liner hanger			

Cement with 416 SX of Cemcrete Blend 45/55 D961/D166 + .7 gpsb D600 + .05 gpsb D135 + .05 gpsb D47 + .4% D65 + .1% D800. Displaced w/ fresh water and mud. Liner hanger and packer set had full returns during cementing. Did not bump plug, float held. WOC 13 Hrs. Trip in hole. Did not find cement at liner top. Rig down and release rig @ 3:00 AM 7/27/01.

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed) MICHAEL S. DAUGHERTY Title VICE PRESIDENT OPERATIONS

Signature *Michael Daugherty* Date 7/30/01

ACCEPTED FOR RECORD SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by (ORIG. SGD.) DAVID R. GLASS Title Office

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.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**N.M. Oil Cons. Division**  
811 S. 1st Street  
Artesia, NM 88210-2834

FORM APPROVED  
OMB NO. 1004-0135  
Expires July 31, 1996

517

SUNDRY NOTICES AND REPORTS ON WELLS

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SUBMIT IN TRIPLICATE - Other Instructions on reverse side

1. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator  
 MURCHILSON OIL & GAS, INC.

3a. Address 1100 MIRA VISTA BLVD.  
 PLANO, TX. 75093-4698

3b. Phone No. (include area code)  
 (972) 931-0700

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
 SURFACE: 1628 FSL & 2150 FWL UNIT K SEC 12 T23S R29E  
 BHL: 660 FNL & 1980 FWL UNIT C SEC 12 T23S R29E

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 NM 0556699 A

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7. If Unit or C/A Agreement, Name and/or No.  
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<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>RUN AND CEMENT</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<u>FIRST INTERMEDIA</u>
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	<u>CASING</u>

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 recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zone. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/MIA. Required subsequent reports shall be filed within 30 day following completion of the involved operations. If the operation results in a multiple completion or recompleation 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.)

Drill 12-1/4" hole to 3120'. Run casing as follows:

39 Jts	10-3/4"	44.22 #/ft	J-55	STL	Bottom
11 Jts	10-3/4"	44.22 #/ft	K-55	STL	
12 Jts	10-3/4"	44.22 #/ft	L-80	STL	
13 Jts	10-3/4"	44.22 #/ft	N-80	STL	Top

Cement with 880 SXS 35:65 POZ Class C + 10% D44 + 6% D20 + .2% D46 followed by 130 SXS Class "C" Neat. Circulate with full returns during job and circulated 285 SX to surface. Shut-in cement head and waited on cement 4 hrs. No flow back. Nipple down BOP. Could not set slips. Cut off 13-3/8" wellhead. Nipple down spacer spool and remove surface head. Weld on 10-3/4" wellhead. Test wellhead to 1000 psi. Nipple up BOP and choke manifold. Test BOP to 5000 psi. GIH with 9-7/8" bit. WOC a total of 33 hrs. Drill out cement and resume drilling open hole.



14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed) MICHAEL S. DAUGHERTY Title VICE PRESIDENT OPERATIONS

Signature *Michael S. Daugherty* Date 6/8/01

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by (ORIG. SGD.) DAVID R. GLASS Title Office

Date JUL 23 2001

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.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

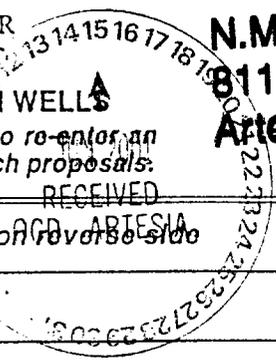
FORM APPROVED  
BUREAU OF LAND MANAGEMENT  
BLM-104-0135  
Effective July 31, 1996

51

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.

N.M. Oil Cons. Division  
811 S. 1st Street  
Artesia, NM 88210-2834



SUBMIT IN TRIPLICATE - Other Instructions on reverse side

1. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator  
 MURCHISON OIL & GAS, INC.

3a. Address 1100 MIRA VISTA BLVD.  
 PLANO, TX. 75093-4698

3b. Phone No. (include area code)  
 (972) 931-0700

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
 SURFACE: 1628 FSL & 2150 FWL UNIT K SEC 12 T23S R29E  
 BHL: 660 FNL & 1980 FWL UNIT C SEC 12 T23S R29E

5. Well No.  
 NM 0556859

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.  
 NASH UNIT 8131

8. Well Name and No.  
 NASH UNIT #52

9. API Well No.  
 30-015-31510

10. Field and Pool, or Exploratory Area  
 NASH DRAW MORROW

11. County or Parish, State  
 EDDY COUNTY, 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 checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Deepen
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Alter Casing
	<input type="checkbox"/> Fracture Treat
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Change Plans
	<input type="checkbox"/> Plug and Abandon
	<input type="checkbox"/> Convert to Injection
	<input type="checkbox"/> Plug Back
	<input type="checkbox"/> Production (Start/Resume)
	<input type="checkbox"/> Reclamation
	<input type="checkbox"/> Recomplete
	<input type="checkbox"/> Temporarily Abandon
	<input type="checkbox"/> Water Disposal
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Well Integrity
	<input checked="" type="checkbox"/> Other <u>SPUD WELL</u>
	<u>RUN SURFACE CASIN</u>
	<u>&amp; CEMENT</u>

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 and 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.)

Spud well 5/29/01 and drill 17-1/2" hole to 390'. Run 11 joints of 13-3/8" 72 #/FT N-80 BTC casing to 390'. Cement with 155 SXS of 35:65 POZ Class "C" + 6% D20 + 2% S1 + .25 #/SX D29 followed by 200 SX of Class "C" + 2% S1 + .25 #/SX D29. Full returns during cement job, bumped plug, float held, and circulated 62 SXS to surface. Cut off conductor pipe and casing and weld on casinghead. Test head to 1000 psi nipple up BOP and choke manifold. Test casing, blind rams and choke manifold to 1000 psi. Trip in hole with 12-1/4 bit. WOC a total of 34 hrs. Drill cement and shoe and resume drilling open hole.

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed) MICHAEL S. DAUGHERTY Title VICE PRESIDENT OPERATIONS

Signature *Michael Daugherty* Date 6/8/01

ACCEPTED FOR RECORD THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by (ORIG. SGD.) DAVID R. GLASS Title Date

Conditions of approval, if any, are hereby approved 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

420

N.M. Oil, Cons. Division  
811 S. 1st Street  
Artesia, NM 88210-2834

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

P/K

Bureau of Land Management  
Received  
JUL 25 2000  
Carlsbad Field Office  
Carlsbad, NM

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

5. LEASE DESIGNATION AND SERIAL NO.

NM 0556859-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

NASH UNIT

8. FARM OR LEASE NAME, WELL NO.

NASH UNIT #52

9. AP WELL NO.

30-015-31510

10. WELL AND POOL, OR WILDCAT

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

SEC. 12, T23S, R29E

12. COUNTY OR PARISH 13. STATE

EDDY

NM

1a. Proposed Field Office  
Carlsbad, NM

DEEPEN

b. TYPE OF WELL

OIL WELL

GAS WELL

OTHER

SINGLE ZONE

MULTIPLE ZONE

2. NAME OF OPERATOR

MURCHISON OIL & GAS, INC.

3. ADDRESS AND TELEPHONE NO.

1445 ROSS AVE., STE. 5300, LB 152, DALLAS, TX. 75202-2883

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)

At surface 1628' FSL & 2150' FWL UNIT B

At proposed prod. zone 660' FNL & 1980 FWL UNIT C

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

17 MILES SOUTHEAST OF CARLSBAD

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

660' BHL

16. NO. OF ACRES IN LEASE

320

17. NO. OF ACRES ASSIGNED TO THIS WELL

320 N/2

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

2640' BHL

19. PROPOSED DEPTH

14000 TVD

20. ROTARY OR CABLE TOOLS

ROTARY

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

2985 GL

22. APPROX. DATE WORK WILL START\*

9/15/00

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8" H-55	68	350'	420 SXS - CIRCULATE
12 1/4"	9 5/8" J-55	36	3100'	1000 SXS - CIRCULATE
8 3/4"	7 5/8" N-80, S-95	33.7	10330' TVD 10600' MD	1500 SXS
6 1/2"	5 1/2" N-80	20 #/F	10000 - 14000 TVD 10300 - 14600 MD	

IT IS PROPOSED TO DRILL THIS WELL TO A TD OF 14,000 TVD AND 14,600' MD AND TEST THE MORROW FORMATION, THE BLOWOUT PREVENTION PROGRAM IS AS FOLLOWS:

- 1) ONE SET OF DRILL PIPE RAMS (5M)
- 2) ONE SET OF BLIND RAMS (5M)
- 3) ONE SET OF HYDRIL (3M)

R-III-P



Notify OCD spud & time to witness cementing of ALL CASING STRINGS

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

24. SIGNED Michael J. DePietro TITLE VICE PRESIDENT OPERATIONS DATE 7/21/00

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ 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 Richard A. Whitney TITLE ASSOC STATE DIR DATE 12-15-00

\*See Instructions On Reverse Side

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88241-1980

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised February 10, 1994  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

DISTRICT II  
P.O. Drawer 88, Artesia, NM 88211-0719

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

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT IV  
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number		Pool Code	Pool Name
Property Code		Property Name	Well Number
OGRID No.		Operator Name	Elevation
		NASH DRAW MORROW	
		NASH	52
015363		MURCHISON OIL & GAS, INC.	2985

Surface Location

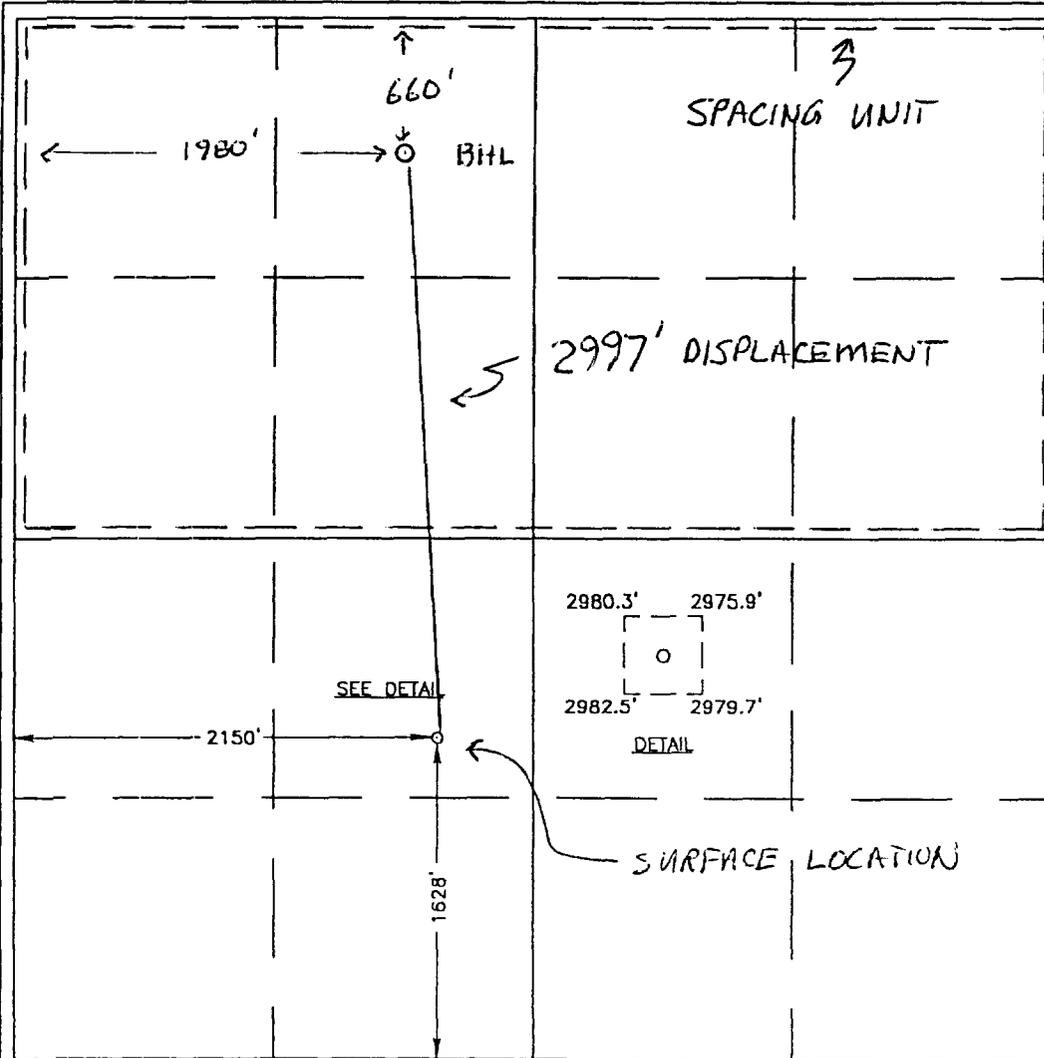
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	12	23 S	29 E		1628	SOUTH	2150	WEST	EDDY

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
C	12	23 S	29 E		660	NORTH	1980	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			

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



**OPERATOR CERTIFICATION**

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

*Michael S. Daugherty*  
Signature

MICHAEL S. DAUGHERTY  
Printed Name

VICE PRESIDENT OPERATIONS  
Title

7/21/00  
Date

---

**SURVEYOR CERTIFICATION**

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.

JUNE 26, 2000  
Date Surveyed

LMP  
Signature & Seal of Professional Surveyor

*Gary Edson*  
Professional Surveyor

NEW MEXICO  
00-11-0775

Certificate No. RONALD G. EDSON 3239  
GARY EDSON 12641  
MACON McDONALD 12185

July 21, 2000

United States Department of the Interior  
Bureau of Land Management  
Roswell District Office  
2909 West Second Street  
Roswell, New Mexico 88201  
Attn: Linda Askawik

**Re: Application for Permit to Drill  
Murchison Oil & Gas, Inc.  
Nash Unit #52  
Eddy County, New Mexico  
Lease No. NM-0556859-A**

Gentlemen:

Murchison Oil & Gas, Inc. "MOGI" respectfully requests permission to drill our Nash Unit #52 with a surface location at 1628' FSL and 2150' FWL, and a bottom hole location at 660' FNL and 1980' FWL of Section 34, T24S, R26E, Eddy County, New Mexico, Federal Lease No. NM-0556859-A. The proposed well will be drilled to a TD of approximately 14,000' (TVD) and 14,600' MD. The location and work area have been staked. It is approximately 17 miles South East of Carlsbad, New Mexico.

In accordance with requirements stipulated in Federal Onshore Oil and Gas Order No. 1 under 43 CFR 3162.1, our Application for Permission to Drill and supporting evidence is hereby submitted.

I. Application for Permit to Drill:

1. Form 3160-3, Application for Permit to Drill.
2. Form C-102 Location and Acreage Dedication Plat certified by Gary Eidson Registered Land Surveyor No. 12641 in the State of New Mexico, dated 6/26/2000.
3. The elevation of the unprepared ground is 2985 feet above sea level.
4. The geologic name of the surface formation is Permian.
5. Rotary drilling equipment will be utilized to drill the well to a measured depth of 14,600', and run casing. This equipment will then be rigged down and the well will be completed with a pulling unit.
6. Proposed total depth is 14,000' TVD.

7. Estimated tops of important geologic markers.

Lamar	3070' TVD
Delaware	3140' TVD
Cherry Canyon	4170' TVD
Bone Springs	6865' TVD
3 <sup>rd</sup> BS SS	9786' TVD
Wolfcamp	10139' TVD
Strawn	12025' TVD
Atoka	12147' TVD
Morrow	12918' TVD

8. Estimated depths at which anticipated water, oil, gas or other mineral bearing formations are expected to be encountered:

Primary Objective:	Morrow	12918' TVD
Secondary Objectives:	Strawn	12025' TVD
	Atoka	12147' TVD

9. The proposed casing program is as follows:

Surface: 13-3/8" OD 68#/FT K-55 BUTT T&C casing set at 350' TVD

1<sup>st</sup> Intermediate: 9-5/8" OD 36#/FT J-55 ST&C casing set at 3100' TVD

2<sup>nd</sup> Intermediate: 7-5/8" 33.7 #/FT N-80 and S-95 FL4S casing set @ 10330' TVD

Production Liner: 5 1/2" 20#/FT N-80 FL4S Liner set @ 10000-14000' TVD

10. Casing setting depth and cementing program:

A. 13-3/8" surface casing set at 350', or in 17-1/2" hole. Circulate cement with 420sx Class C with additives.

If cement does not circulate, a temperature survey will be run to find the TOC and then finish cementing to surface through 1" using Class C cement with additives.

B. 9-5/8" 1<sup>st</sup> intermediate casing set at 3100' in 12-1/4" hole. Circulate cement with 800sx 35:65 POZ/Class C and 200sx Class C cement with additives.

- C. 7-5/8" 2<sup>nd</sup> intermediate casing set at 10330' TVD in 8-3/4" hole. Cement with 1500sxs Class C cement with additives.
- D. 5-1/2" production liner set from 10,000' to 14,000' TVD. Cement with 340sx Class C cement with additives.

Note: Cement volumes may need to be adjusted to hole caliper.

11. Pressure Control Equipment

0' – 350'	None
350' – 3100'	13-3/8" 5000# ram type preventers with one set blind rams and one set pipe rams and a 3000# annular preventer.
3100' – 14000' TVD	13-3/8" 5000# ram type preventers with one set blind rams and one set pipe rams and a 3000# annular type preventer. A choke manifold and 120 gallon accumulator with floor and remote operating stations and auxiliary power system. Rotating head below 10330' TVD. See attached Sketch of BOP Equipment.

A kelly cock will be installed and maintained in operable condition and a drill string safety valve in the open position will be available on the rig floor.

After setting the 7-5/8" casing, the blowout preventers and related control equipment shall be pressure tested to 5000 psi and 3000 psi respectively. Any equipment failing to test satisfactorily shall be repaired or replaced. Results of the BOP test will be recorded in the Driller's Log. The BOP's will be maintained ready for use until drilling operations are completed.

BOP drills will be conducted as necessary to assure that equipment is operational and each crew is properly trained to carry out emergency duties.

Accumulator shall maintain a pressure capacity reserve at all times to provide for the close-open-close sequence of the blind and pipe rams of the hydraulic preventers.

12. Mud Program:

0 – 350' Spud with fresh water gel flocculated with lime and pretreated with 6-8 lbs/bbl cottonseed hulls, 2-4 lbs/bbl fiber, and 2 lbs/bbl paper for possible severe loss circulation zone 100-200'. If necessary drill without returns, or if full returns cannot be established at casing point mix 150 bbls viscous mud treated with LCM as above and spot on bottom before coming out of the hole to run casing.

350' – 3100' Drill out with brine water through a controlled section of the reserve pit. Add paper for seepage control or to sweep hole, as needed. At casing point, sweep hole with 150± bbls viscous mud with 6-8 lbs/bbl LCM before coming out of the hole to run casing.

3100' – 10330' TVD Drill out with fresh water through a controlled section of the reserve pit. Use paper, sea mud, and salt water gel slugs to sweep the hole and control seepage, as necessary. To control corrosion maintain ph 8.5 to 9.5 with caustic soda and use corrosion chemicals from 3100' to total depth.

10330' – 14000' TVD Circulate steel pits and mud up to 36-40 sec/qt viscosity, 6 to 8cc API filtrate, and 3.0+% KCL.

13. A direction well plan prepared by Directional Drilling Contractors LLC is attached which represents the proposed well plan.

14. Testing, Logging and Coring Program:

A. Testing program: None anticipated.

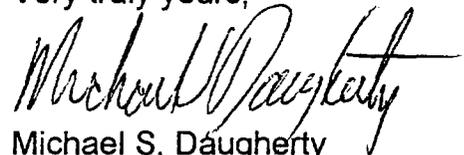
B. Mud logging program: Two man unit from 8000' to TD.

C. Electric logging program: CNL/LDT/CAL/GR, DLL/CAL/GR.

D. Coring program: Possible sidewall rotary cores.

15. No abnormal temperatures, or H<sub>2</sub>S gas are anticipated. Adequate flare lines will be installed off the mud/gas separator where gas may be flared safely.
16. Anticipated starting date is October 15, 2000 subject to rig availability. It should take approximately 60 days to drill the well and another 10 days to complete.
17. The Multi-Point Surface Use & Operation Plan is attached.
18. If the Bureau of Land Management needs additional information to evaluate this application, please advise.

Very truly yours,



Michael S. Daugherty  
Vice President, Operations

MSD/cb/NashUnit#52-BLM-APTD

Attachments

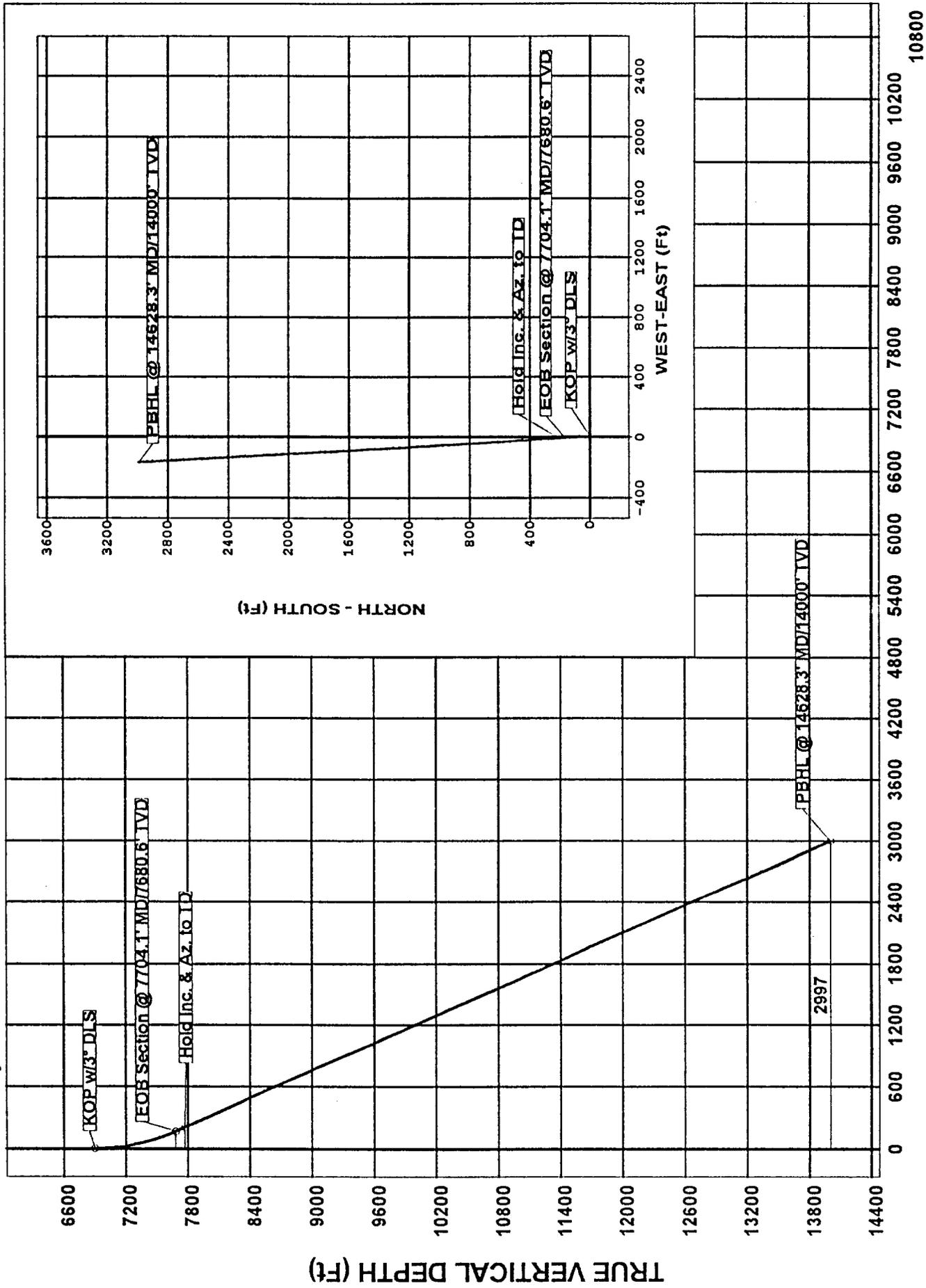


Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	Subsea TVD FT	N-S FT	E-W FT	Vertical Section FT	Dogleg Severity Deg/100
8704.14	24.12	356.75	8593.25	-5608.25	574.60	-32.64	575.52	.00
8804.14	24.12	356.75	8684.52	-5699.52	615.40	-34.96	616.39	.00
8904.14	24.12	356.75	8775.79	-5790.79	656.21	-37.28	657.27	.00
9004.14	24.12	356.75	8867.05	-5882.05	697.01	-39.60	698.14	.00
9104.14	24.12	356.75	8958.32	-5973.32	737.82	-41.92	739.01	.00
9204.14	24.12	356.75	9049.58	-6064.58	778.62	-44.24	779.88	.00
9304.14	24.12	356.75	9140.85	-6155.85	819.43	-46.56	820.75	.00
9404.14	24.12	356.75	9232.12	-6247.12	860.24	-48.87	861.62	.00
9504.14	24.12	356.75	9323.38	-6338.38	901.04	-51.19	902.50	.00
9604.14	24.12	356.75	9414.65	-6429.65	941.85	-53.51	943.37	.00
9704.14	24.12	356.75	9505.91	-6520.91	982.65	-55.83	984.24	.00
9804.14	24.12	356.75	9597.18	-6612.18	1023.46	-58.15	1025.11	.00
9904.14	24.12	356.75	9688.45	-6703.45	1064.27	-60.47	1065.98	.00
10004.14	24.12	356.75	9779.71	-6794.71	1105.07	-62.79	1106.85	.00
10104.14	24.12	356.75	9870.98	-6885.98	1145.88	-65.10	1147.73	.00
10204.14	24.12	356.75	9962.24	-6977.24	1186.68	-67.42	1188.60	.00
10304.14	24.12	356.75	10053.51	-7068.51	1227.49	-69.74	1229.47	.00
10404.14	24.12	356.75	10144.78	-7159.78	1268.30	-72.06	1270.34	.00
10504.14	24.12	356.75	10236.04	-7251.04	1309.10	-74.38	1311.21	.00
10604.14	24.12	356.75	10327.31	-7342.31	1349.91	-76.70	1352.08	.00
10704.14	24.12	356.75	10418.58	-7433.58	1390.71	-79.02	1392.96	.00
10804.14	24.12	356.75	10509.84	-7524.84	1431.52	-81.33	1433.83	.00
10904.14	24.12	356.75	10601.11	-7616.11	1472.33	-83.65	1474.70	.00
11004.14	24.12	356.75	10692.37	-7707.37	1513.13	-85.97	1515.57	.00
11104.14	24.12	356.75	10783.64	-7798.64	1553.94	-88.29	1556.44	.00
11204.14	24.12	356.75	10874.91	-7889.91	1594.74	-90.61	1597.31	.00
11304.14	24.12	356.75	10966.17	-7981.17	1635.55	-92.93	1638.19	.00
11404.14	24.12	356.75	11057.44	-8072.44	1676.35	-95.24	1679.06	.00
11504.14	24.12	356.75	11148.70	-8163.70	1717.16	-97.56	1719.93	.00
11604.14	24.12	356.75	11239.97	-8254.97	1757.97	-99.88	1760.80	.00
11704.14	24.12	356.75	11331.24	-8346.24	1798.77	-102.20	1801.67	.00
11804.14	24.12	356.75	11422.50	-8437.50	1839.58	-104.52	1842.55	.00
11904.14	24.12	356.75	11513.77	-8528.77	1880.38	-106.84	1883.42	.00
12004.14	24.12	356.75	11605.03	-8620.03	1921.19	-109.16	1924.29	.00
12104.14	24.12	356.75	11696.30	-8711.30	1962.00	-111.47	1965.16	.00
12204.14	24.12	356.75	11787.57	-8802.57	2002.80	-113.79	2006.03	.00
12304.14	24.12	356.75	11878.83	-8893.83	2043.61	-116.11	2046.90	.00
12404.14	24.12	356.75	11970.10	-8985.10	2084.41	-118.43	2087.78	.00
12504.14	24.12	356.75	12061.37	-9076.37	2125.22	-120.75	2128.65	.00
12604.14	24.12	356.75	12152.63	-9167.63	2166.03	-123.07	2169.52	.00
12704.14	24.12	356.75	12243.90	-9258.90	2206.83	-125.39	2210.39	.00

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	Subsea TVD FT	N-S FT	E-W FT	Vertical Section FT	Dogleg Severity Deg/100
12804.14	24.12	356.75	12335.16	-9350.16	2247.64	-127.70	2251.26	.00
12904.14	24.12	356.75	12426.43	-9441.43	2288.44	-130.02	2292.13	.00
13004.14	24.12	356.75	12517.70	-9532.70	2329.25	-132.34	2333.01	.00
13104.14	24.12	356.75	12608.96	-9623.96	2370.05	-134.66	2373.88	.00
13204.14	24.12	356.75	12700.23	-9715.23	2410.86	-136.98	2414.75	.00
13304.14	24.12	356.75	12791.49	-9806.49	2451.67	-139.30	2455.62	.00
13404.14	24.12	356.75	12882.76	-9897.76	2492.47	-141.61	2496.49	.00
13504.14	24.12	356.75	12974.03	-9989.03	2533.28	-143.93	2537.36	.00
13604.14	24.12	356.75	13065.29	-10080.29	2574.08	-146.25	2578.24	.00
13704.14	24.12	356.75	13156.56	-10171.56	2614.89	-148.57	2619.11	.00
13804.14	24.12	356.75	13247.83	-10262.83	2655.70	-150.89	2659.98	.00
13904.14	24.12	356.75	13339.09	-10354.09	2696.50	-153.21	2700.85	.00
14004.14	24.12	356.75	13430.36	-10445.36	2737.31	-155.53	2741.72	.00
14104.14	24.12	356.75	13521.62	-10536.62	2778.11	-157.84	2782.59	.00
14204.14	24.12	356.75	13612.89	-10627.89	2818.92	-160.16	2823.47	.00
14304.14	24.12	356.75	13704.16	-10719.16	2859.73	-162.48	2864.34	.00
14404.14	24.12	356.75	13795.42	-10810.42	2900.53	-164.80	2905.21	.00
14504.14	24.12	356.75	13886.69	-10901.69	2941.34	-167.12	2946.08	.00
14604.14	24.12	356.75	13977.95	-10992.95	2982.14	-169.44	2986.95	.00
<b>PBHL @ 14628.3' MD/14000' TVD</b>								
14628.30	24.12	356.75	14000.00	-11015.00	2992.00	-170.00	2996.83	.00



Company: MURCHISON/RK FORD & ASSOC.  
 Lease/Well: NASH #52 DIRECTIONAL  
 Location: Eddy County  
 State/Country: New Mexico / USA



o - Nash #52

VERTICAL SECTION (Ft) @ 356.75°

# Patterson Drilling Company

Rig #10

14,500'

## DRAWWORKS

Drewstar N-46  
 Drake: V80 Double Parmac  
 Twin Disc Torque Converter

## ENGINES

Two Caterpillar 3408 Diesels, 475 HP ea

## DERRICK

Pyramid 136', 800,000# Rated Capacity

## SUBSTRUCTURE

Pyramid 18', 800,000# Setback Capacity  
 KD - 19', Rotary Clearance - 15'

## MUD PUMPS

Pump #1: Idaco 700 w/Cat 379  
 Pump #2: Drewstar D-750 w/Cat 379

## DRILL STRING

4-1/2" Grade E, New, 20# Drill Pipe  
 6-1/2" New Drill Collars  
 Other sizes of drill pipe and drill collars are available

## BLOWOUT PREVENTERS

13 5/8" 5,000# Ram/Ram/Annular Shaffer SL

## MUD SYSTEM

Shale pit, 500 bbls, suction pit, 500 bbls, 5 sub guns, 2 electric mud stirrers, 2 mud mixing pumps (6x6 centrifugal), two 70 HP electric motors, double screen high-speed vibrating shale shaker

## MUD HOUSE

None

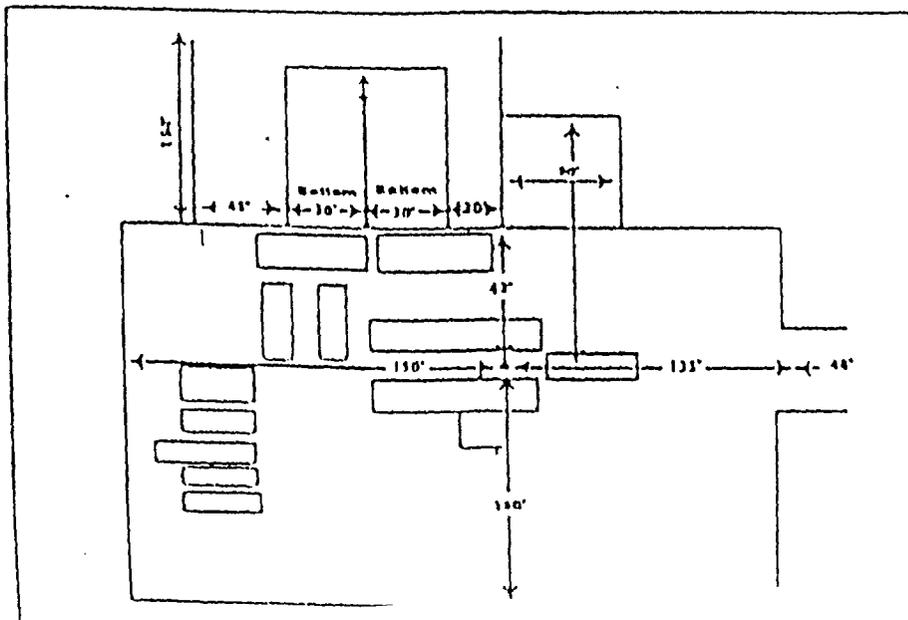
## COMMUNICATIONS

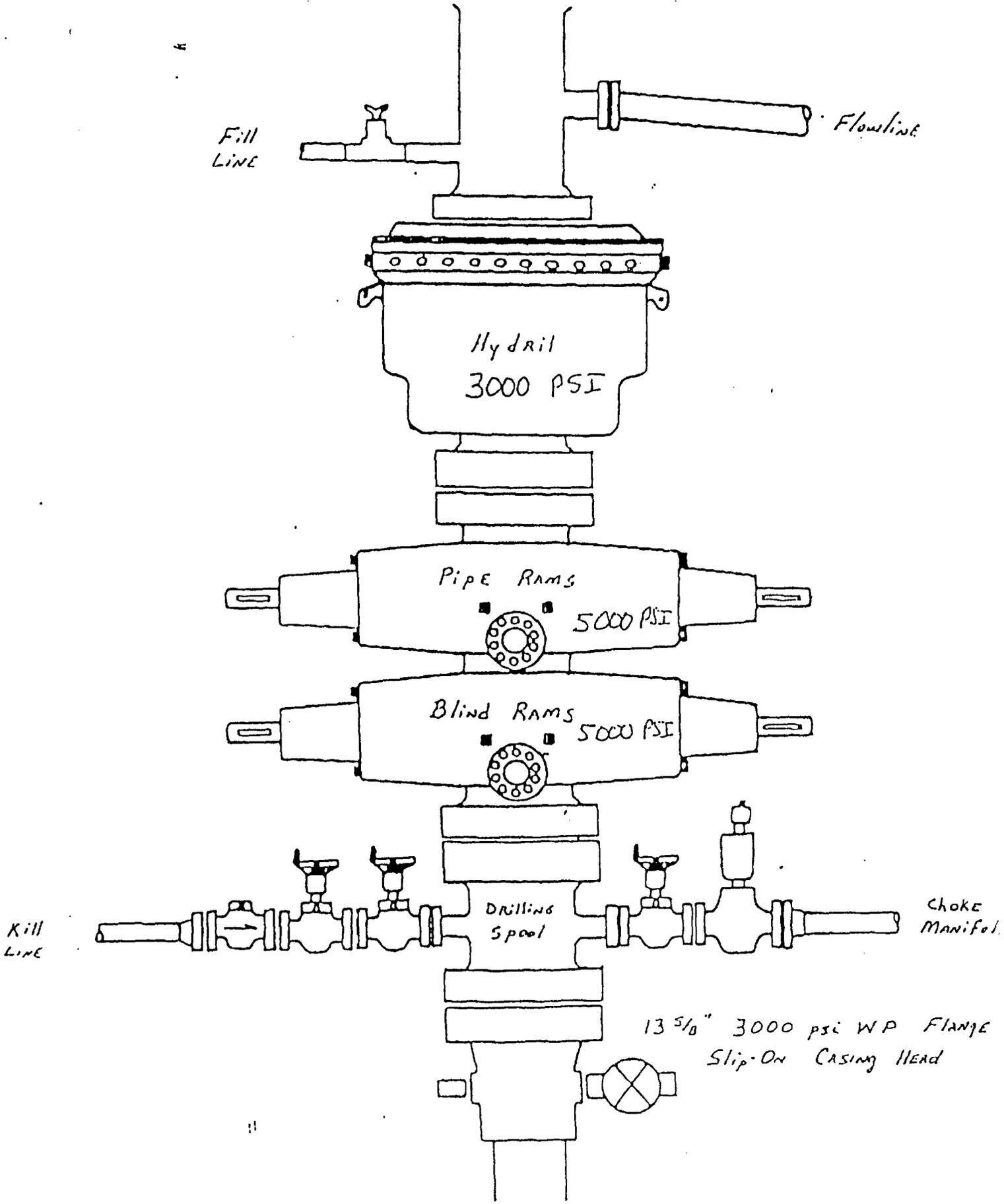
24 hour direct cellular telephone

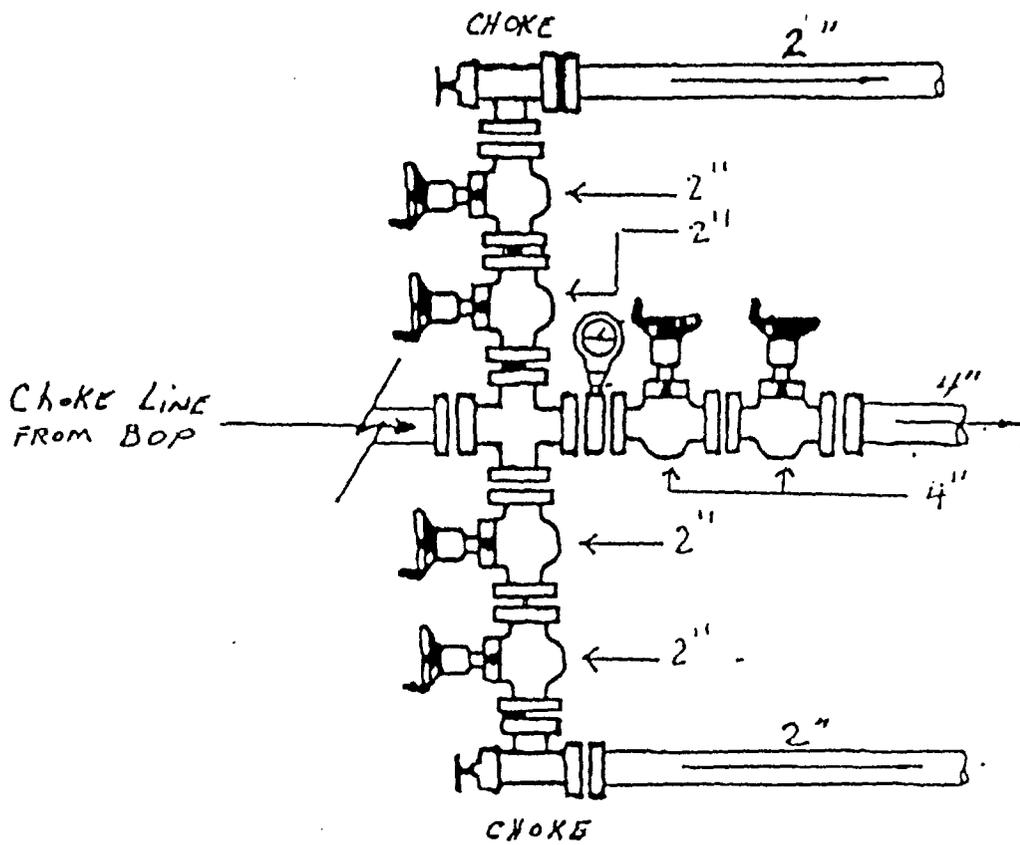
## OTHER EQUIPMENT

Blocks, Gardner Denver 300 Ton  
 Hook, Gardner Denver 300 Ton  
 Swivel, 7 SX Drewstar 300 Ton  
 Rotary Table, Gardner Denver 27 1/2"  
 Electrical Power, Two 275 kW Generators w/3400 Cat  
 Fresh Water Storage, 1000 bbls  
 Housing.

"Hole Requirements will dictate actual Reservo Pit size (TOOLPUSHER SHOULD BE CONSULTED)"







## MULTI-POINT SURFACE USE AND OPERATIONS PLAN

MURCHISON OIL & GAS, INC.  
NASH UNIT #52  
EDDY COUNTY, NEW MEXICO  
LEASE NO. NM-0556859-A

This plan is submitted with the Application for Permit to Drill the above described well. The purpose of the plan is to identify the location of the proposed well, the proposed construction activities and operations plan, the magnitude of necessary surface disturbance involved and the procedures to be followed in rehabilitating the surface after completion of the operation so that a complete appraisal may be made of the environmental effects associated with the operation.

The well, and work area have been staked by a registered New Mexico land surveyor. Desert West Archaeological Services have been engaged to make an archaeological reconnaissance of the work area. Their findings concerning cultural resources will be reported to the Bureau of Land Management.

### 1. Existing Roads

A copy of a USGS "Remuda Basin, New Mexico" Topographic map is attached showing the proposed location. The well location is spotted on this map, which also shows the existing road system.

Directions to location: Travel East from Loving, NM on State Highway 31 and turn southeast on State Highway 128 and go 4 miles, then east 1 mile on lease road then north 2/10 mile to the location.

### 2. Planned Access Road

- A. An existing lease access road 100' North of the location will be used to gain access. About 100' feet of new lease road will have to be constructed.
- B. Surfacing material: Six inches of caliche and water, compacted and graded.
- C. Maximum Grade: Less than 3%
- D. Turnouts: None needed.
- E. Drainage Design: N/A.
- F. Culverts: None needed.

## Multi-Point Surface Use and Operations Plan

Nash Unit #52

Page 2

- G. Cuts and Fills: Leveling the location will require minimal cuts or fills.
  - H. Gates or Cattleguards: None required.
3. Existing wells within a one mile radius of the proposed development well are shown on the attached map.
4. Location of Existing and/or Proposed Facilities
- A. If the well is productive, production facilities will be constructed on the well pad. The facility will consist of a stack pack, one 300 bbl oil tank and one 300 bbl fiberglass water tank. All permanent above ground facilities will be painted in accordance with the BLM's painting guidelines simulating the color of sandstone brown.
  - B. All site security guidelines identified in 43 CFR 3162.7 regulations will be adhered to and a site security plan will be submitted for the Nash Unit #52 tank battery. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed.
5. Location and Type of Water Supply
- Fresh water and brine water will be used to drill this well. It will be purchased from a supply in Carlsbad, NM vicinity and transported to the well site.
6. Source of Construction Materials
- Caliche for surfacing the well pad will be obtained from a Federal pit located in Eddy County, New Mexico.
7. Method of Handling Waste Disposal
- A. Drill Cuttings will be disposed of in drilling pits.
  - B. Drilling fluids will be allowed to evaporate in the drilling pits until pits are dry.
  - C. Water produced during tests will be disposed of in the drilling pits. Oil produced during tests will be stored in test tanks until sold.

## Multi-Point Surface Use and Operations Plan

### Nash Unit #52

#### Page 3

- D. Current laws and regulations pertaining to the disposal of human waste will be complied with.
  - E. Trash, waste paper, garbage and junk will be collected in steel trash bins and removed after drilling and completion operations are completed. All waste material will be contained to prevent scattering by the wind.
  - F. All trash and debris will be removed from the wellsite within 30 days after finishing drilling and/or completion operations.
8. Ancillary Facilities
- A. None needed.
9. Wellsite Layout
- A. The location and dimensions of the well pad, mud pits, reserve pit and location of major rig components are shown on the attached well site layout sketch. If Patterson Drilling Company Rig #18 is not utilized a comparable rig will be substituted. The V-door will be to the North and the pits to the West.
  - B. Leveling of the wellsite will be required with minimal cuts or fills anticipated.
  - C. The reserve pit will be plastic lined.
  - D. The pad and pit area have been staked and flagged.
10. Plans for Restoration of the Surface
- A. After completion of drilling and/or completion operations, all equipment and other materials not needed for operations will be removed. Pits will be filled and location cleaned of all trash and junk to leave the well site in as aesthetically pleasing condition as possible.
  - B. Any unguarded pits containing fluids will be fenced until they are filled.
  - C. After abandonment of the well, surface restoration will be in accordance with the land owner. This will be accomplished as expeditiously as possible. Barring unforeseen problems, all pits will be filled and leveled within 90 days after abandonment.

11. Other Information

- A. Topography: The location is a flat plain. GL elevation is 2987'.
- B. Soil: Sandy clay loams.
- C. Flora and Fauna: The vegetative cover is generally sparse consisting of mesquite, yucca, shinnery oak, sandsage and perennial native range grasses. Wildlife in the area is also sparse consisting of coyotes, rabbits, rodents, reptiles, dove and quail.
- D. Ponds and Streams: A Playa Lake is located within .2 miles to the north and west. See attached topographic map.
- E. Residences and Other Structures: There are no occupied dwellings within a 1 mile radius of the location.
- F. Archaeological, Historical and Cultural Sites: Cultural resources have been recorded in the area. Desert West Archaeological Services have been engaged to make an archaeological reconnaissance of the work area.
- G. Land Use: Cattle ranching.
- H. Surface Ownership: The surface is public land leased by the BLM to Hart M. Greenwood, Jr., P.O. Box 104, Carlsbad, NM. 88221. They will be notified of our intention to drill prior to any activity.

Upon completion of the well, any plastic material used to line the pits or sumps will be cut off below ground level as far as possible and disposed of before the pits are covered. All unattended pits containing liquid will be fenced and the liquid portion allowed to evaporate before the pits are broken and backfilled.

All waste associated with the drilling operation will be contained in steel bins and removed. All garbage and debris left on site will be removed within 30 days of the final completion. The well site, if a producer, will be maintained and kept clean of all trash and litter which detracts from the surrounding environment. Equipment will be maintained in accordance with good operating practice.

After the wellsite is cleaned and pits and sumps backfilled, any obstruction to the natural drainage will be corrected by ditching or terracing. All disturbed areas, including any access road no longer needed, will be ripped. Those areas will be reseeded with grass if, in the opinion of the land owner, it is required.

12. Operator's Representatives

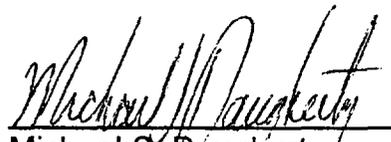
The Field representatives responsible for assuring compliance with the approved surface use and operations plan are as follows:

Michael S. Daugherty  
1445 Ross Ave., Ste. 5300, LB 152  
Dallas, TX. 75202-2883  
Office Phone: (214) 953-1414  
Home Phone: (972) 618-0792

Randy Ford  
210 W. Wall St., Suite 600  
Midland, TX. 79701  
Office Phone: (915) 682-0440

13. Certification

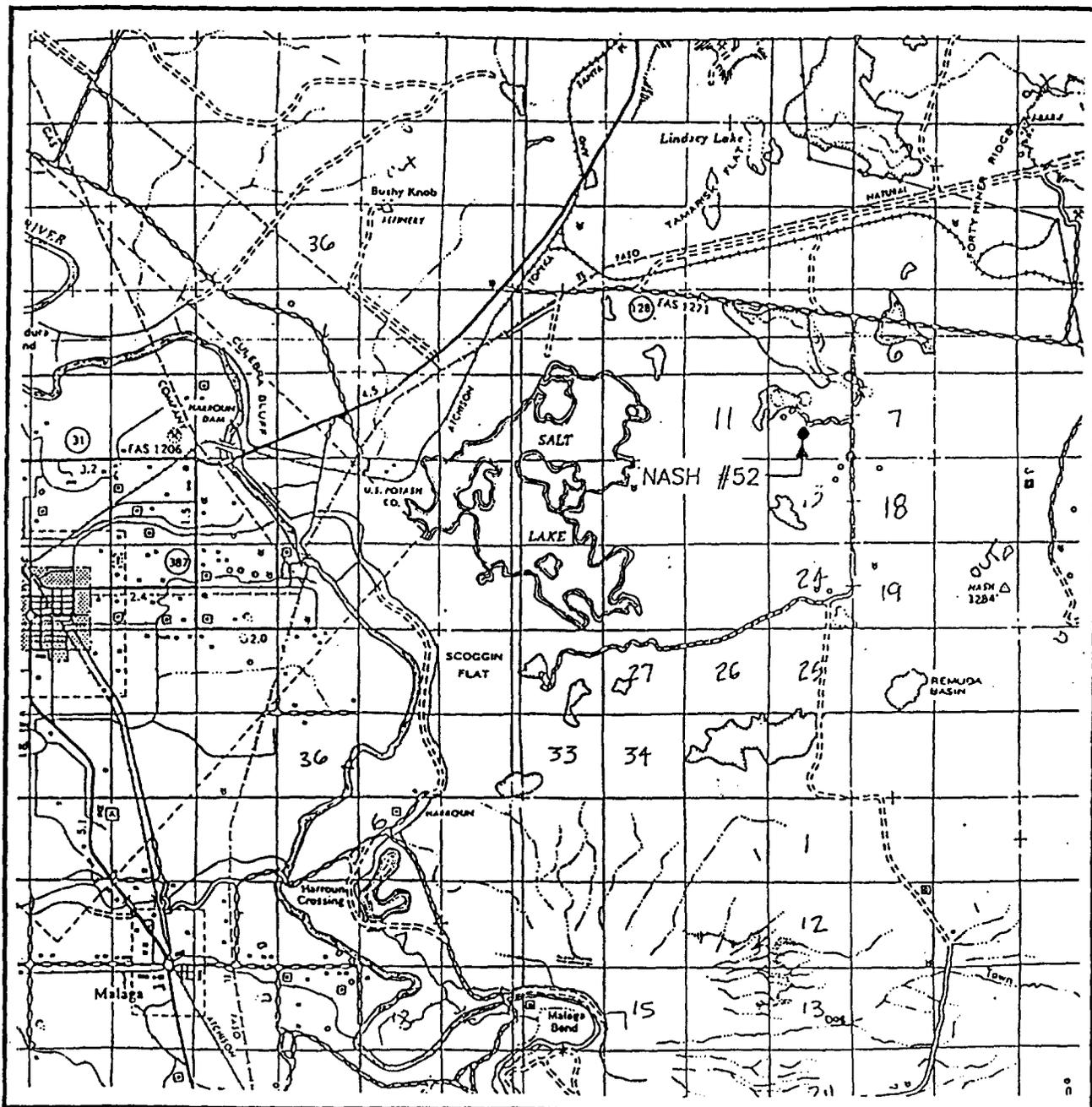
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated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

  
Michael S. Daugherty

7/21/00  
Date

Vice President, Operations  
Murchison Oil & Gas, Inc.

# VICINITY MAP

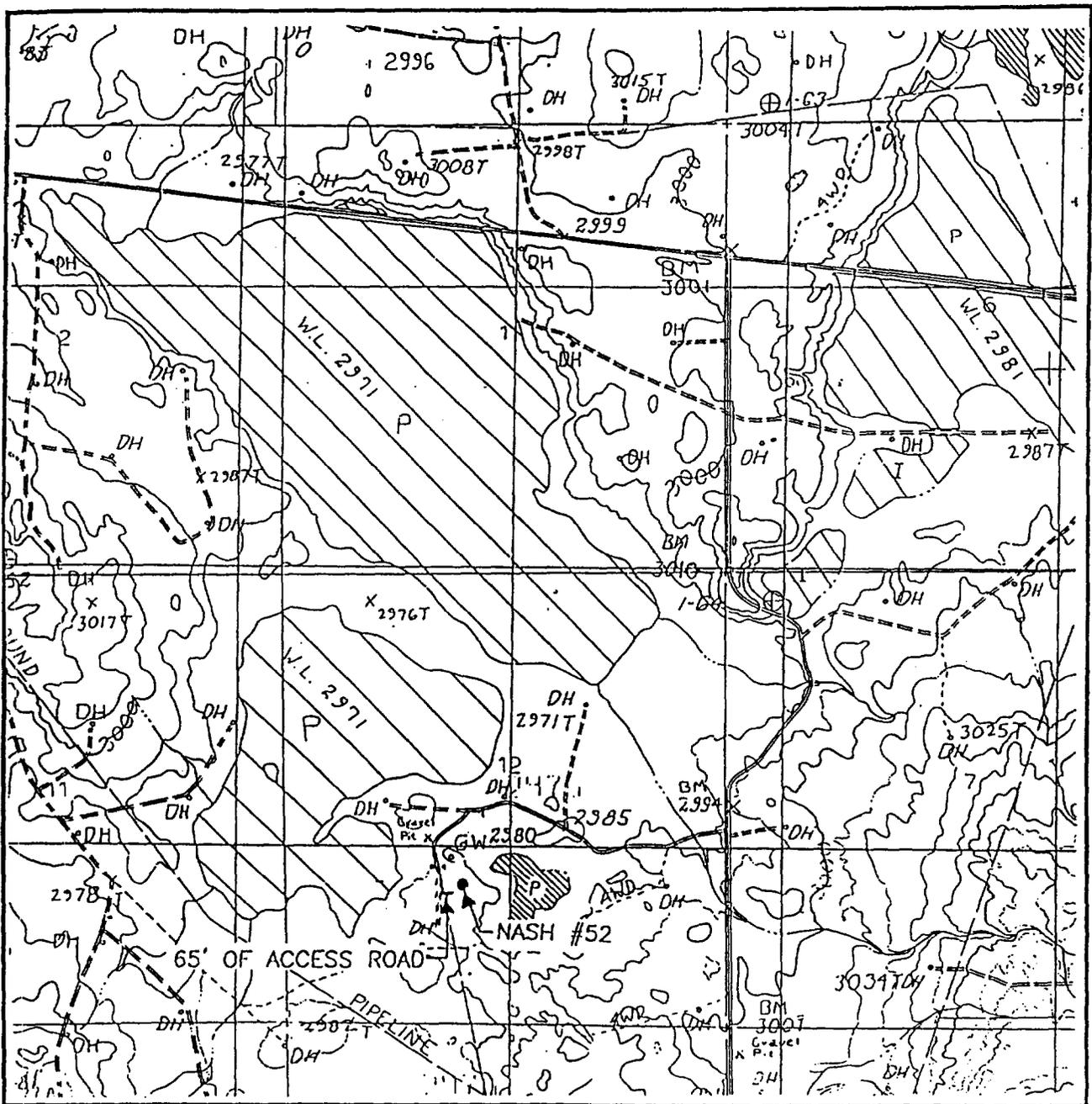


SCALE: 1" = 2 MILES

SEC. 12 TWP. 23-S RGE. 29-E  
 SURVEY N.M.P.M.  
 COUNTY EDDY  
 DESCRIPTION 1628' FSL & 2150' FWL  
 ELEVATION 2985  
 OPERATOR MURCHISON OIL & GAS, INC.  
 LEASE NASH

JOHN WEST SURVEYING  
 HOBBS, NEW MEXICO  
 (505) 393-3117

# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:  
REMUDA BASIN, N.M. - 10'

SEC. 12 TWP. 23-S RGE. 29-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1628' FSL & 2150' FWL

ELEVATION 2985

OPERATOR MURCHISON OIL & GAS, INC.

LEASE NASH

U.S.G.S. TOPOGRAPHIC MAP  
REMUDA BASIN, N.M.

JOHN WEST SURVEYING  
HOBBS, NEW MEXICO  
(505) 393-3117

U.S.

Texaco  
HBP  
23179

PR. Bass  
HBP 15232

N/2 HBC

2

Murchison O&G Murchison O&G

10776

499988

(Marala Inc)  
Murchison O&G  
19246

Hanagan  
Pet  
3 21 90  
James  
Bros. Co.

(Hanagan)  
(Pet M.I.)

Murchison O&G  
8 4  
055472

Strata etal  
(Murchison O&G)  
0556859

Strata Prod, etal  
(Murchison O&G)  
10-1-81  
14140

Murchison O&G  
Marala, Inc.  
8 15 75  
19246

11 NASH UNIT 12  
STRATA PROD. (OPER.)  
PROPOSED LOCATION  
NASH UNIT #52 WELL  
1678' FSL & 2000' FWL  
T23S-R29E

7 MIDLAND MAP

(Alfura) McElvann  
O&G Prop.  
17589  
Nash Ut. State

Asher Res  
Mesa Pet  
HBP  
0556863

Petro  
Synergy  
8-1-74  
0554223

Strata Prod, etal  
(Murchison)  
O&G, etal  
0556859

15 Strata etal  
(Murchison etal)  
0556859

(Mesa) Der.)  
K 6600  
F300  
Strata etal  
P83

(Mesa) Atoka 4.8  
Mil.  
Morr. 11A  
1 Mil.  
MTS  
L 3350  
Sur loc

Murchison O&G  
Asher Res  
HBP  
0556863  
Mesa)  
Nash Unit

4 Murchison  
O&G  
6 1 75  
0556860  
Kaiser  
Frances,  
etal  
125 8b  
KGS

23 F236

Strata Prod  
(Mesa)  
Nash Ut  
Morr. 11A  
3.9 Mil.  
3c. 5-30-75  
S.T. PVE  
Star

(Mesa) Strata etal  
(Mesa)  
Nash Ut  
TOS-OC  
DIAR-75  
Murchison  
O&G  
(Phillips)  
0556857

MTS  
Altura  
17589  
Nash Unit  
Nash Unit

(Hanagan Pet.)  
M.I.

Echo Prod  
12-1-2009  
103603  
155 00

Texaco BK Expl. Texaco BK Expl.  
Richardson Oils, BK Expl.  
etal 1/2 all sec. Remuda  
Basin State  
E-5894

20 25 S.R. Bass  
Inc etal  
Remuda  
Basin-Fad  
James  
Bros.  
8/05  
Texaco 1/2  
Remuda  
Basin-Fad  
E-5229

2 SWP  
Texaco  
17056  
(Texaco)

23 REMUDA

24 BK Expl. Texaco Texaco  
(Texaco)  
Remuda 4 Mil. (P/B)

19 Remuda Basin-Fad  
Edd. Ld. Co.  
Mesa Pet., 1/2