District I State of New Mexico Form C-101 P. O. Box 1980, Hobbs, NM 88241-1980 Energy, Minerals & Natural Resources Department Revised February 10, 1994 District II Instructions on back P. O. Drawer DD, Artesia, NM 88211-0719 **OIL CONSERVATION DIVISION** District III Submit to Appropriate District Office 1000 Rio Brazos Rd., Aztec, NM 87410 P. O. Box 2088 State Lease - 6 Copies District IV Santa Fe, NM 87504-2088 P. O. Box 2088, Santa Fe, NM 87504-2088 Fee Lease - 5 Copies AMENDED REPORT APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE Operator Name and Address. OGRID Number The Wiser Oil Company 022922 ³ API Number c/o J. O. Easley, Inc. 30-025-33438 P. O. 1796, Roswell, NM 88201-1796 (505) 623-3758 Property Code ⁵ Property Name Well No. 14578 Caprock Maljamar Unit 261 Surface Location UL or lot no. Township Feet from the North/South Line Section Range Lot Idn Feet from the East/West line County 0 18 17S 33E 760 South 2080 East Lea ⁸ Proposed 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 Proposed Pool 1 ¹⁰ Proposed Pool 2 Maljamar Grayburg San Andres (43329) Well Type Code Work Type Code 13 Cable/Rotary 15 Ground Level Elevation Lease Type Code Rotary N 0 4221' S Multiple Proposed Depth ¹⁸ Formation 19 Contractor 20 Spud Date 4800' San Andres 6-1-96 ²¹ Proposed Casing and Cement Program Hole size Casing Size Casing weight/foot Setting Depth Estimated TOC Sacks of Cement 300 Class "C"/2% CaCl 121/4" 8 5/8" 24# 550' 700 Halliburton Lite/1/4# 7 7/8" 51/2" 17# 4800' Flocele, 325 Prem+/.5% Halad-9; 325 Prem+/.5% Halad-344/3% KCl ²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary. See attached Exhibits "A" & "B" for complete Drilling Program. Permit Expires 1 Year From Approval Date Unless Drilling Underway ²³ I hereby certify that the information given above is true and complete to the best of **OIL CONSERVATION DIVISION** my knowledge and ORIGINAL SIGNED BY Approved by: Signature: GARY WINK Title: FIELD REP. II Printed name: Michael R. Burch, CPL Approval Date AY 15 1995 Expiration Date: Agent for The Wiser Oil Company Title: Conditions of Approval: Attached 5-14-96 Phone: (505) 623-3758 Date:

EXHIBIT "A"

DRILLING PROGRAM

- I. The geological surface formation is recent Permian with quaternary alluvium and other surficial deposits.
- II. Estimated Tops of Geological Markers:

.

FORMATION	<u>DEPTH</u>
Rustler Anhydrite	540'
Top of Salt	670'
Base of Salt	1570'
Queen	2650'
Grayburg	3050'
San Andres	3430'
TD	4800'

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

SUBSTANCE	<u>DEPTH</u>
Fresh Water	There is little, if any, in this section
Oil	Fren 7-Rivers; Grayburg and San Andres below 3200'
Gas	None anticipated

IV. A. Proposed Casing Program:

-	<u>HOLE</u> <u>SIZE</u>	<u>CASING</u> <u>SIZE</u>	GRADE	<u>WEIGHT</u> PER FOOT	DEPTH
	12 ¼"	8 5/8"	New 8RD ST&C J-55	24#	550'
	7 7/8"	5 1⁄2"	New 8RD LT&C J-55	17#	4800'

B. Proposed Cement Program:

8 5/8" Cmt w/ 300 sx Class "C" cmt w/2% CaCl. Circulate to surface.

5 ¹/₂" Cmt w/ 700 sx Halliburton Lite w/¹/₄# Flocele, 325 sx Premium Plus w/.5% Halad-9, & 325 sx Premium Plus w/.5% Halad-344 w/3% KCl.

The top of cement is designed to reach 100' above 8 5/8" casing shoe.

V. Proposed Mud Program:

The well will be drilled to total depth using brine & fresh water. Depths of systems are as follows:

<u>INTERVAL</u>	MUD TYPE	MUD WT.	VISCOSITY
0-550'	Fresh Water	8.8 ppg	30
550'-TD	Brine Water	9.5-10.5 ppg	28

VI. Proposed Control Equipment:

Will install on the 8 5/8" surface casing a 10" Series 900 Type "E" Shaffer Double Hydraulic BOP and will test before drilling in the Queen formation. BOP working pressure: 3000 psi. See Exhibit "H" for BOP layout.

VII. Auxiliary Equipment:

Blowout preventor, gas detector, kelly cock, pit level monitor, flow sensors, and stabbing valve.

VIII A. Testing Program:

Drill Stem Tests: None planned

B. Logging Program:

LOG

. · ·

.

<u>Interval</u>

GR-DLL-MSFL-Cal	T.D 2,300'
GR-CNL-CDL-Cal	T.D Surface

C. Coring Program:

None planned

IX No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered, the proposed mud program will be modified to increase the mud weight. The estimated maximum bottom hole pressure is 1980 psi.

EXHIBIT "B"

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

I. <u>Hydrogen Sulfide Training</u>

. .

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

- 1. The hazards and characteristics of hydrogen sulfide (H_2S) .
- 2. The proper use and maintenance of personal protective equipment and life support systems.
- 3. The proper use of H_2S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
- 4. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

- 1. The effects of H_2S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
- 2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
- 3. The contents and requirements of the H₂S Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H_2S zone (within 3 days or 500 feet) and weekly H_2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H_2S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

II. H₂S Safety Equipment and Systems

Note: All H_2S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating, the first zone containing, or reasonably expected to contain, H_2S .

- 1. Well Control Equipment:
 - A. Flare line with electronic igniter or continuous pilot.
 - B. Choke manifold with a minimum of one remote choke.
 - C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
 - D. Auxiliary equipment to include annular preventer, mud-gas separator, rotating head, and flare gun with flares.
- 2. Protective equipment for essential personnel:
 - A. Mark II Surviveair 30-minute units located in the dog house and at briefing areas, as indicated on Exhibit "G".
- 3. H_2S detection and monitoring equipment:
 - A. Two portable H₂S monitors positioned on location for best coverage and response. These units have warning lights and audible sirens when H₂S levels of 20 ppm are reached.
 - B. One portable S02 monitor positioned near flare line.
- 4. Visual warning systems:
 - A. Wind direction indicators as shown on Exhibit "G".
 - B. Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used when appropriate.
- 5. Mud program:
 - A. The mud program has been designed to minimize the volume of H_2S circulated to the surface. Proper mud weight, safe drilling practices, and the use of H_2S scavengers will minimize hazards when penetrating H_2S -bearing zones.
 - B. A mud-gas separator and an H_2S gas buster will be utilized.

- 6. Metallurgy:
 - A. All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H_2S service.
 - B. All elastomers used for packing and seals shall be H_2S trim.
- 7. Communication:
 - A. Radio communications in company vehicles including cellular telephone and 2-way radio.
 - B. Land Line (telephone) communications at field office.
- 8. Well testing:
 - A. Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity which are necessary to safely and adequately conduct the test. The drill stem testing will be conducted during daylight hours, and formation fluids will not be flowed to the surface. All drill stem testing operations conducted in an H_2S environment will use the closed chamber method of testing.

DISTRICT I P.0. Box 1980, Hobbs, NM 88241-1980

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

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

DISTRICT IV P.0. Box 2088, Banta Fe, NM 87504-2088

LOT 1 41.72 AC.

LOT 2 41.82 AC.

LOT 3 41.90 AC.

LOT 4 42.00 AC.

OIL CONSERVATION DIVISION P.0. Box 2088 Santa Fe, New Mexico 87504-2088

□ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

				CATION	AND ACKEA	GE DEDICATI	UN PLAT			
-	Number 25-33	438		Pool Code 329		Pool Name Maljamar Grayburg San Andres				
Property 0145			Property Name CAPROCK MALJAMAR UNIT				rty Name Well Number			
00000 N				THE	-	Operator Name Eleve		Elevatic 4221		
					Surface Loc	ation				
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
0	18	17 S	33 E		760	SOUTH	2080	EAST	LEA	
			Bottom	Hole Loo	cation If Diffe	erent From Sur	face	*	·	
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
Dedicated Acre 40	Joint of	pr Infill	Consolidation	Code Or	der No.	1			<u> </u>	
NO ALLO	WABLE 1	VILL BE OR A	ASSIGNED NON-STAN	TO THIS	COMPLETION U IT HAS BEEN	NTIL ALL INTER APPROVED BY	RESTS HAVE BI	EEN CONSOLIDA	TED	
							I hereb contained herei)R CERTIFICAT y certify the the in n is true and compl wledge and belief.	formation	

-2080'—

760'

Milal-	3. Burt
Signature	

M	ichael R.	Burch	, CPL
Printed	Agent	for The	Wiser Oil

Company Title 5-14-96

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.

MAY 8, 1996	
Date Superied J. Elong	JLP
 Date Superiod J. E. Milling Signature & Seal of Still Prosentionial Suprover	
5 mill \$ 33 6, 135 5-10-5	76
1 9.0. Nom 96-1 4-0564	
Corteriorie No. John WE WEST, 6	76
"IN ROFFSBOOD P.J. EIDSON, 32	39
TITITITITI GART G. EIDSON, 120	541

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

State of New Mexicu

Energy, Minerals and Natural Resources Department

12 7 7 8 13 18 17 18 THE WISER OIL COMPANY #149 • #150 CAPROCK MALJAMAR UNIT #261 ELEVATION 4221' 90⁰ DRY HOLE MARKER STATE 18-8 #5 EXISTING ROADo6 13 18 18 17 24 19 #162 #163 19 20 1000 0 1000 2000 -----SCALE: 1"=1000' THE WISER OIL COMPANY THE CAPROCK MALJAMAR UNIT #261 LOCATED 760' FROM THE SOUTH LINE AND 2080' FROM THE EAST LINE OF SECTION 18, TOWNSHIP 17 SOUTH, RANGE 33 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO. 5/8/96 Survey Date: Sheet of Sheets 1 1 JOHN W. WEST ENGINEERING COMPANY W.O. Number: 96-11-0564 Drawn By: JAMES L. PRESLEY CONSULTING ENGINEERS & SURVEYORS - HOBBS, NEW MEXICO Date: 5/9/96 DISK: JLP#157 WIS0564A

SECTION 18, TOWNSHIP 17 SOUTH, RANGE 33 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO.

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

SEC. <u>18</u> TWP.<u>17–S</u> RGE.<u>33–E</u> SURVEY <u>N.M.P.M.</u> COUNTY <u>LEA</u> DESCRIPTION <u>760' FSL & 2080' FEL</u> ELEVATION <u>4221'</u> OPERATOR <u>THE WISER OIL COMPANY</u> LEASE <u>CAPROCK MALJAMAR UNIT</u> U.S.G.S. TOPOGRAPHIC MAP DOG LAKE, N.M. CONTOUR INTERVAL - 10'

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

VICINITY MAP



SCALE: 1'' = 2 MILES

 SEC. ____18__TWP._17-S__RGE._33-E

 SURVEY ______N.

 COUNTY ______LEA

 DESCRIPTION _760'_FSL_&_2080'_FEL

 ELEVATION ______4221'

 OPERATOR THE_WISER_OIL_COMPANY

LEASE CAPROCK MALJAMAR UNIT

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

Hucs Ver