N.M. Oil Cons. DIV-Dist. 2 UNITED STATES 301 W. Grand Avenue 5

Expires January 31, 2004

DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT SIGN NO 88210

5. Lease Serial No.

NM 31636	
----------	--

APPLICATION FOR PERMIT TO DRILL OR REENTER

ATTEIOATION TO E	THE ON NEED TEN			
la. Type of Work: DRILL REENT	ER		7. If Unit or CA Agreer	nent, Name and No.
1b. Type of Well: Oil Well Gas Well Other	Single Zone Mul	tiple Zone	8. Lease Name and Well Whirlybird 24 Federa	
2. Name of Operator			9. API Well No.	
Marbob Energy Corporation /4049			30 -015- 3	54401
3a. Address	3b. Phone No. (include area code)		10. Field and Print Ex	ploratory
PO Box 227, Artesia, NM 88211-0227	505-748-3303		Wildcat; Morrow	96541
4. Location of Well (Report location clearly and in accordance with	h any State requirements. *)		11. Sec., T., R., M., or B	lk. and Survey or Area
At surface 2600' FNL & 1150' FWL	SUBJECT TO LIKE			
At proposed prod. zone 1980' FNL & 1150' FWL	APPROVAL BY STA	TE	Section 24: T24S-R25	iE
14. Distance in miles and direction from nearest town or post office*			12. County or Parish	13. State
			Eddy	NM
15. Distance from proposed* location to nearest property or lease line, ft.	16. No. of Acres in lease	17. Spacin	g Unit dedicated to this we	11
(Also to nearest drig. unit line, if any)		320		RECEIVED
18. Distance from proposed location* to nearest well, drilling, completed,	19. Proposed Depth	20. BLM/	BIA Bond No. on file	OCT 2 1 2005
applied for, on this lease, ft.	12100'	585716	Ω	QD:ADT:
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will	start*	23. Estimated duration	- FILLING
3933' GL	October 7, 2005		21 Days	·
	24. Attachments	CARLSBA	AD CONTROLLED W	ATER BASIN

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

- 1. Well plat certified by a registered surveyor.
- 2. A Drilling Plan.
- 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- 5. Operator certification.
- 6. Such other site specific information and/or plans as may be required by the

	authorized officer.	
25. Signature	Name (Printed Typed)	Date
	Amy Reid	9/7/05
Title		
Land Department		
Approved by (Signature)	Name (Printed Typed) /s/ Ioe G. Lara	Date
Icl Toe G Lara	/s/ loe vi. Lara	00T 4 0 000F

Title ACTING FIELD MANAGER

Office

CARLSBAD FIELD OFFICE

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. APPROVAL FOR 1 YEAR

Conditions of approval, if any, are attached

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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)

WITNESS \33/8" and 95/8" Cement Jobs

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS **ATTACHED**

State of New Mexico DISTRICT I Energy, Minerals and Natural Resources Department 1626 N. PRENCH DR. HO Form C-102 Revised JUNE 10, 2003 DISTRICT II OIL CONSERVATION DIVISION Submit to Appropriate District Office 1301 W. GRAND AVENUE, State Lease - 4 Copies 1220 SOUTH ST. FRANCIS DR. Fee Lease - 3 Copies DISTRICT III Santa Fe, New Mexico 87505 1000 Rio Brazos Rd., Azted, NM 87410 DISTRICT IV WELL LOCATION AND ACREAGE DEDICATION PLAT ☐ AMENDED REPORT 1220 S. ST. FRANCIS DE PR. NM 87505 Pool Code Pool Name API Number 96070 WILDCAT; MORROW Well Number Property Code Property Name WHIRLYBIRD 24 FEDERAL Operator Name Elevation OGRID No. MARBOB ENERGY CORPORATION 3933 14049 Surface Location Feet from the North/South line UL or lot No. Section Township Range Lot ldn Feet from the East/West lüne County 24 24-S 25-E 2600 NORTH 1150 WEST **EDDY** Bottom Hole Location If Different From Surface Section Lot Idn Feet from the North/South line UL or lot No. Township Range Feet from the East/West line County 24 25-E 1980 NORTH 24-S 1150 WEST **EDDY** Joint or Infill Consolidation Code Dedicated Acres Order No. 32e 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 betief?. AMY REID GEODETIC COORDINATES Printed Name NAD 27 NME LAND DEPARTMENT Y=4374.25.6 N BHL X=493687.9 F SEPTEMBER 14, 2005 3926.1 3915.6 Date AT.=32*122'09.35" N ONG.=104°21'13.47" SURVEYOR CERTIFICATION I hereby certify that the well ilocation shown on this plat was plotted from field notes of actual surveys made by me or under my Supervison and that the same correct to the best of my belief. 1018c7 Date Surve Kedmining AUGUST 12, 2005 DEL Date Surveyor & Geat of Company of the Professional Surveyor

Producing area

7 8/16/05

1.2641

Certificate No. GARY EDSON

Hand delivered to Brian @ OCD 9/4/05-AR

District I 1625 N. French Dr., Hobbs, NM 88240 District II District III

1000 Rio Brazos Road, Aztec, NM 87410

District IV

12200 Expression Pressure For NM 87505 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico **Energy Minerals and Natural Resources**

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

RECEIVED

Form C-144

March 12, 2004

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank	k covered by a "general plan"? Yes \(\subseteq \text{No} \) \(\subseteq \)	SEP 1 9 2005
Type of action: Registration of a pit of	r below-grade tank 🛛 Closure of a pit or below-grad	e tank USD-APTESIA
Operator: Marbob Energy Corporation Telephone: 50	05-748-3303 e-mail address: marbob	@marbob.com
Address: Po Box 227, Artesia, NM 88211-0227		
Facility or well name: Whirlybird 24 Federal #1 API #:	U/L or Qtr/Qtr N/2 Sec 2	4 т 24S R 25E
County: Eddy LatitudeLongitude	NAD: 1927 🗌 1983 🔲 Surface Owner Fed	leral 🛮 State 🗌 Private 🔲 Indian 🗀
Pit	Below-grade tank	
Type: Drilling ☑ Production ☐ Disposal ☐	Volume:bbl Type of fluid:	
Workover Emergency	Construction material:	
Lined Unlined	Double-walled, with leak detection? Yes If not,	explain why not.
Liner type: Synthetic ☑ Thickness 12 mil Clay ☐ Volume		
bbl		To the second se
Depth to ground water (vertical distance from bottom of pit to seasonal high	Less than 50 feet	(20 points) (10 points)
water elevation of ground water.)	50 feet or more, but less than 100 feet	(0 points) 0 points
	100 feet of more	•
Wellhead protection area: (Less than 200 feet from a private domestic	Yes	(20 points)
water source, or less than 1000 feet from all other water sources.)	No	(0 points) 0 points
	Less than 200 feet	(20 points)
Distance to surface water: (horizontal distance to all wetlands, playas,	200 feet or more, but less than 1000 feet	(10 points)
irrigation canals, ditches, and perennial and ephemeral watercourses.)	1000 feet or more	(0 points) 0 points
	Ranking Score (Total Points)	0 points
If this is a pit closure: (1) attach a diagram of the facility showing the pit's	relationship to other equipment and tanks. (2) Indicate	e disposal location:
onsite offsite from If offsite, name of facility		
date. (4) Groundwater encountered: No 🔲 Yes 🔲 If yes, show depth belo	w ground surfaceft. and attach sample	results. (5) Attach soil sample results and a
diagram of sample locations and excavations.		
I hereby certify that the information above is true and complete to the best of been/will be constructed or closed according to NMOCD guidelines , a Date: September 24, 2005	my knowledge and belief. I further certify that the a general permit , or an (attached) alternative OC	bove-described pit or below-grade tank has D-approved plan .
Printed Name/Title: Amy Reid Signature	m (out)	
Your certification and NMOCD approval of this application/closure does not otherwise endance public health prints in the prints of the prints	relieve the operator of liability should the contents of toperator of its responsibility for compliance with any o	the pit or tank contaminate ground water or other federal, state, or local laws and/or
Approval: Field Supervisor		
Date:	~00	
Printed Name/Title	Signature	



Company: Marbob Energy

Mule

Site: Well:

Field:

Wellpath:

Orginal Hole

Mule 24 Footsel #4 Which bird 24 Federal #1 Mule 24 Federal #1 Which bird 24 Federal #1

Date: 9/7/2005

Time: 08:35:56

Co-ordinate(NE) Reference: Site: Mule 24 Federal #1, True North Vertical (TVD) Reference: SITE 0.0

Section (VS) Reference: Plan:

Well (0.00N,0.00E,0.00Azi)

Plan #1 090605

Field:

Mule

Eddy County, New Mexico

Map System: US State Plane Coordinate System 1927

Geo Datum: NAD27 (Clarke 1866) Sys Datum: Mean Sea Level

Map Zone:

New Mexico, Eastern Zone

Coordinate System: Geomagnetic Model: Site Centre igrf2005

Site:

Mule 24 Federal #1

Eddy County, New Mexico

Section 24, T24-S, R25-E

Site Position: From:

Ground Level:

Well Position:

Lease Line

Position Uncertainty:

0.00 ft 0.00 ft

Northing: Easting:

Latitude: ft

Longitude:

North Reference: **Grid Convergence:** True 0.00 deg

Well:

Mule 24 Federal #1 +N/-S

0.00 ft Northing: 0.00 ft Easting:

0.00 ft

0.00 ft

Slot Name: Latitude:

30 59 24.512 N

+E/-WPosition Uncertainty:

0.00 ft

0.00 ft Longitude: 105 55 44.137 W

Surface

Wellpath: Orginal Hole

Drilled From:

Tie-on Depth:

Above System Datum:

0.00 ft Mean Sea Level

Current Datum: Magnetic Data: Field Strength: Vertical Section:

9/6/2005 0 nT Depth From (TVD)

Height

+N/-S

Declination: Mag Dip Angle: 0.00 deg 0.00 deg

+E/-W

Direction deg

ft ft ft 0.00 0.00 0.00 0.00

Plan:

Plan #1 090605

Principal: No Date Composed: Version:

Tied-to:

9/6/2005

From Surface

Plan Section Information

	2 1411 5000101										
	MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100f	Build t deg/100ft	Turn deg/100ft	TFO deg	Target
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
ı	5630.41	0.00	0.00	5630.41	0.00	0.00	0.00	0.00	0.00	0.00	
ı	6380.41	15.00	0.00	6371.87	97.62	0.00	2.00	2.00	0.00	0.00	
ı	8707.84	15.00	0.00	8620.00	700.00	0.00	0.00	0.00	0.00	0.00	Target @ 8620' TVD
	12227.93	0.00	360.00	12100.00	1158.29	0.00	0.43	-0.43	0.00	180.00	Mule 24 Federal #1 PBHL

Su	rve	3

MID ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ff	Build deg/100f	Turn t deg/100ft	Tool/Comment
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	
1000.00	0.00	0.00	1000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1100.00	0.00	0.00	1100.00	0.00	0.00	0.00	0.00	0.00	0.00	
1200.00	0.00	0.00	1200.00	0.00	0.00	0.00	0.00	0.00	0.00	
1300.00	0.00	0.00	1300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1400.00	0.00	0.00	1400.00	0.00	0.00	0.00	0.00	0.00	0.00	
1500.00	0.00	0.00	1500.00	0.00	0.00	0.00	0.00	0.00	0.00	:



Company: Marbob Energy

Field: Mule
Site: Mule 24 Federal #1 Why Nybyrd 24 Federal #1
Well: Mule 24 Federal #1 Why Nybyrd 24 Federal #1
Wellpath: Orginal Hole

Date: 9/7/2005 Time: 08:35:56 Page: Co-ordinate(NE) Reference: Site: Mule 24 Federal #1, True North Vertical (TVD) Reference: SITE 0.0 Section (VS) Reference: Well (0.00N,0.00E,0.00Azi) Plan: Plan #1 090605

c	 	 ٠.	

MD	Incl	Azim	TVD	⊹+N/-S	+E/-W	vs	DLS	Build	Turn	Tool/Comment
ft	deg	deg	ft	(ft)	ft	ft	deg/100f	l deg/100f	t deg/100ft	
1600.00	0.00	0.00	1600.00	0.00	0.00	0.00	0.00	0.00	0.00	
1700.00	0.00	0.00	1700.00	0.00	0.00	0.00	0.00	0.00	0.00	
1800.00	0.00	0.00	1800.00	0.00	0.00	0.00	0.00	0.00	0.00	
1900.00	0.00	0.00	1900.00	0.00	0.00	0.00	0.00	0.00	0.00	
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	
2100.00	0.00	0.00	2100.00	0.00	0.00	0.00	0.00	0.00	0.00	
2200.00	0.00	0.00	2200.00	0.00	0.00	0.00	0.00	0.00	0.00	
2300.00	0.00	0.00	2300.00	0.00	0.00	0.00	0.00	0.00	0.00	
2400.00	0.00	0.00	2400.00	0.00	0.00	0.00	0.00	0.00	0.00	
2500.00	0.00	0.00	2500.00	0.00	0.00	0.00	0.00	0.00	0.00	
2600.00	0.00	0.00	2600.00		0.00	0.00	0.00	0.00	0.00	
2700.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	
2800.00			2700.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	2800.00	0.00	0.00	0.00	0.00	0.00	0.00	
2900.00	0.00	0.00	2900.00	0.00	0.00	0.00	0.00	0.00	0.00	
3000.00	0.00	0.00	3000.00	0.00	0.00	0.00	0.00	0.00	0.00	
3100.00	0.00	0.00	3100.00	0.00	0.00	0.00	0.00	0.00	0.00	
3200.00	0.00	0.00	3200.00	0.00	0.00	0.00	0.00	0.00	0.00	
3300.00	0.00	0.00	3300.00	0.00	0.00	0.00	0.00	0.00	0.00	
3400.00	0.00	0.00	3400.00	0.00	0.00	0.00	0.00	0.00	0.00	
3500.00	0.00	0.00	3500.00	0.00	0.00	0.00	0.00	0.00	0.00	
3600.00	0.00	0.00	3600.00	0.00	0.00	0.00	0.00	0.00	0.00	
3700.00	0.00	0.00	3700.00	0.00	0.00	0.00	0.00	0.00	0.00	
3800.00	0.00	0.00	3800.00	0.00	0.00	0.00	0.00	0.00	0.00	
3900.00	0.00	0.00	3900.00	0.00	0.00	0.00	0.00	0.00	0.00	
1000.00	0.00	0.00	4000.00	0.00	0.00	2.22				
4100.00	0.00	0.00 0.00	4000.00 4100.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00	0.00	0.00	
4200.00	0.00	0.00	4200.00	0.00	0.00	0.00	0.00	0.00	0.00	
4300.00	0.00	0.00	4300.00	0.00	0.00		0.00	0.00	0.00	
4400.00	0.00	0.00	4400.00	0.00	0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	
							0.00	0.00	0.00	
4500.00 4600.00	0.00	0.00	4500.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	4600.00	0.00	0.00	0.00	0.00	0.00	0.00	
4700.00	0.00	0.00	4700.00	0.00	0.00	0.00	0.00	0.00	0.00	
4800.00	0.00	0.00	4800.00	0.00	0.00	0.00	0.00	0.00	0.00	
4900.00	0.00	0.00	4900.00	0.00	0.00	0.00	0.00	0.00	0.00	
5000.00	0.00	0.00	5000.00	0.00	0.00	0.00	0.00	0.00	0.00	
5100.00	0.00	0.00	5100.00	0.00	0.00	0.00	0.00	0.00	0.00	
5200.00	0.00	0.00	5200.00	0.00	0.00	0.00	0.00	0.00	0.00	
5300.00	0.00	0.00	5300.00	0.00	0.00	0.00	0.00	0.00	0.00	
5400.00	0.00	0.00	5400.00	0.00	0.00	0.00	0.00	0.00	0.00	
5500.00	0.00	0.00	5500.00	0.00	0.00	0.00	0.00	0.00	0.00	
5600.00	0.00	0.00	5600.00	0.00	0.00	0.00	0.00	0.00	0.00	
630.41	0.00	0.00	5630.41	0.00	0.00	0.00	0.00	0.00	0.00	KOP @# 5630' w/ 2° Da
5700.00	1.39	0.00	5699.99	0.85	0.00	0.85	2.00	2.00	0.00	KOP @# 5630' w/ 2° Do
5800.00	3.39	0.00	5799.90	5.02	0.00	5.02	2.00	2.00	0.00	
900.00	5.39	0.00	5899.60	12.60	0.00	10.00	0.00	0.00	0.00	
500.00	7.39	0.00	5998.98	12.68 23.81	0.00 0.00	12.68 23.81	2.00 2.00	2.00 2.00	0.00 0.00	
6100.00	9.39	0.00	6097.90	38.40	0.00	38.40	2.00	2.00	0.00	
6200.00	11.39	0.00	6196.25	56.44	0.00	56.44	2.00	2.00	0.00	
300.00	13.39	0.00	6293.92	77.90	0.00	77.90	2.00	2.00	0.00	
5380.41	15.00	0.00	6371.87	97.62	0.00	07.60	2.00			E /B / E
3400.00	15.00	0.00	6390.79	102.69	0.00 0.00	97.62 102.69	2.00	2.00	0.00	End of Build @ 15° Inclin
5500.00	15.00	0.00	6487.39	128.57			0.00	0.00	0.00	
600.00	15.00	0.00	6583.98		0.00	128.57	0.00	0.00	0.00	
3700.00	15.00	0.00	6680.57	154.45 180.33	0.00 0.00	154.45 180.33	0.00 0.00	0.00 0.00	0.00	
									0.00	



Company: Marbob Energy
Field: Mule
Site: Mule 24 Federal #1-Which Voice 24 Federal #1
Well: Mule 24 Federal #4 Which bird 24 Federal #1
Wellpath: Orginal Hole

Section (VS) Reference: Plan:

Date: 9/7/2005 Time: 08:35:56 Page: Co-ordinate(NE) Reference: Site Mule 24 Federal #1, True North Vertical (TVD) Reference: SITE 0:0

Well (0.00N,0.00E,0.00Azi) Plan #1 090605

c	 	

Survey										
MD ft	Incl deg	Azim	TVD ft	+N/-S ft	+E/-W	VS .	DLS	Build	Turn	Tool/Comment
**************************************	ueg	deg	ı	П	ft	ft	aeg/100i	t deg/100	ft deg/100ft	
6800.00	15.00	0.00	6777.16	206.21	0.00	206.21	0.00	0.00	0.00	
6900.00	15.00	0.00	6873.76	232.10	0.00	232.10	0.00	0.00	0.00	
7000.00	15.00	0.00	6970.35	257.98	0.00	257.98	0.00	0.00	0.00	
7100.00	15.00	0.00	7066.94	283.86	0.00	283.86	0.00	0.00	0.00	
7200.00	15.00	0.00	7163.54	309.74	0.00	309.74	0.00	0.00	0.00	
7300.00	15.00	0.00	7260.13	335.62	0.00	335.62	0.00	0.00	0.00	
7400.00	15.00	0.00	7356.72	361.51	0.00	361.51	0.00	0.00	0.00	
7500.00	15.00	0.00	7453.31	387.39	0.00	387.39	0.00	0.00	0.00	
7600.00	15.00	0.00	7549.91	413.27	0.00	413.27	0.00	0.00	0.00	
7700.00	15.00	0.00	7646.50	439.15	0.00	439.15	0.00	0.00	0.00	
7000.00	15.00	0.00		405.00	0.00	405.00				
7800.00	15.00	0.00	7743.09	465.03	0.00	465.03	0.00	0.00	0.00	
7900.00	15.00	0.00	7839.68	490.91	0.00	490.91	0.00	0.00	0.00	
8000.00	15.00	0.00	7936.28	516.80	0.00	516.80	0.00	0.00	0.00	
8100.00	15.00	0.00	8032.87	542.68	0.00	542.68	0.00	0.00	0.00	
8200.00	15.00	0.00	8129.46	568.56	0.00	568.56	0.00	0.00	0.00	
8300.00	15.00	0.00	8226.05	594.44	0.00	594.44	0.00	0.00	0.00	
8400.00	15.00	0.00	8322.65	620.32	0.00	620.32	0.00	0.00	0.00	
8500.00	15.00	0.00	8419.24	646.21	0.00	646.21	0.00	0.00	0.00	
8600.00	15.00	0.00	8515.83	672.09	0.00	672.09	0.00	0.00	0.00	
8707.84	15.00	0.00	8620.00	700.00	0.00	700.00	0.00	0.00	0.00	Target @ 8620' TVD
8800.00	14.61	0.00	8709.10	723.55	0.00	723.55	0.43	-0.43	0.00	
8900.00	14.18	0.00	8805.96	748.41	0.00	748.41	0.43	-0.43	0.00	
9000.00	13.76	0.00	8903.00	772.54	0.00	772.54	0.43	-0.43	0.00	
9100.00	13.33	0.00	9000.22	795.96	0.00	795.96	0.43	-0.43 -0.43	0.00	
9200.00	12.90	0.00	9097.61	818.65	0.00	818.65	0.43	-0.43 -0.43	0.00	
0200.00	10.40	0.00	0405.47	0.40.00						
9300.00	12.48	0.00	9195.17	840.62	0.00	840.62	0.43	-0.43	0.00	
9400.00	12.05	0.00	9292.89	861.86	0.00	861.86	0.43	-0.43	0.00	
9500.00	11.63	0.00	9390.76	882.38	0.00	882.38	0.43	-0.43	0.00	
9600.00	11.20	0.00	9488.78	902.17	0.00	902.17	0.43	-0.43	0.00	
9700.00	10.77	0.00	9586.95	921.22	0.00	921.22	0.43	-0.43	0.00	
9800.00	10.35	0.00	9685.25	939.55	0.00	939.55	0.43	-0.43	0.00	
9900.00	9.92	0.00	9783.69	957.15	0.00	957.15	0.43	-0.43	0.00	
10000.00	9.50	0.00	9882.26	974.01	0.00	974.01	0.43	-0.43	0.00	Allow Natural Drop to Ver
10100.00	9.07	0.00	9980.95	990.14	0.00	990.14	0.43	-0.43	0.00	
10200.00	8.64	0.00	10079.76	1005.54	0.00	1005.54	0.43	-0.43	0.00	
10300.00	8.22	0.00	10178.68	1020.20	0.00	1020.20	0.43	-0.43	0.00	
10400.00	7.79	0.00	10277.70	1034.12	0.00	1020.20	0.43	-0.43 -0.43	0.00	
10500.00	7.37	0.00	10376.83	1047.31	0.00	1034.12	0.43	-0.43 -0.43	0.00	
10600.00	6.94	0.00	10476.05	1059.76	0.00	1059.76	0.43	-0.43 -0.43	0.00	
10700.00	6.51	0.00	10575.36	1071.48	0.00	1039.76	0.43	-0.43 -0.43	0.00	
10800.00	6.09	0.00	10674 76	1002.45	0.00	1000 15	0.40			
10900.00	5.66	0.00	10674.76	1082.45	0.00	1082.45	0.43	-0.43	0.00	
11000.00	5.24	0.00	10774.23	1092.68	0.00	1092.68	0.43	-0.43	0.00	
11100.00	5.24 4.81	0.00	10873.78	1102.18	0.00	1102.18	0.43	-0.43	0.00	
11200.00	4.81	0.00	10973.40	1110.93	0.00	1110.93	0.43	-0.43	0.00	
11200.00	4.30	0.00	11073.08	1118.95	0.00	1118.95	0.43	-0.43	0.00	
11300.00	3.96	0.00	11172.81	1126.22	0.00	1126.22	0.43	-0.43	0.00	
11400.00	3.53	0.00	11272.60	1132.75	0.00	1132.75	0.43	-0.43	0.00	
11500.00	3.11	0.00	11372.43	1138.54	0.00	1138.54	0.43	-0.43	0.00	
11600.00	2.68	0.00	11472.30	1143.59	0.00	1143.59	0.43	-0.43	0.00	
11700.00	2.25	0.00	11572.21	1147.89	0.00	1147.89	0.43	-0.43	0.00	
11800.00	1.83	0.00	11672.14	1151.45	0.00	1151.45	0.43	-0.43	0.00	
11900.00	1.40	0.00	11772.10	1154.27	0.00	1154.27	0.43	-0.43 -0.43	0.00	
12000.00	0.98	0.00	11872.08	1156.34	0.00	1156.34	0.43	-0.43	0.00	
								5.75	0.00	



Company: Marbob Energy

Site: Mule 24 Federal #4 Whirly bird Federal #1
Well: Mule 24 Federal #1
Well: Mule 24 Federal #1
Wellpath: Orginal Hole

Date: 9/7/2005 Time: 08:35:56 Page: Co-ordinate(NE) Reference: Site: Mule 24 Federal #1, True North Vertical (TVD) Reference: SITE 0.0 Section (VS) Reference: Well (0.00N,0.00E,0.00Azi) Plan: Plan #1 090605

Survey

MD	Incl	Azim	TVD	+N/-S	+E/-W	VS	DLS	Build	Turn	Tool/Comment
ft	deg	deg	ft	ft	ft	ft	deg/100ft	deg/100	t deg/100ft	
12100.00	0.55	0.00	11972.07	1157.67	0.00	1157.67	0.43	-0.43	0.00	
12200.00	0.12	0.00	12072.07	1158.26	0.00	1158.26	0.43	-0.43	0.00	
12227.93	0.00	360.00	12100.00	1158.29	0.00	1158.29	0.43	-0.43	0.00	Mule 24 Federal #1 PBHL

Targets

Name Description Dip.	TVD Dir. ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	A	A181111	titude - n Sec	uo xii coe	<_ Deg	KIN 15 200	XX.77.681	St. 300 / 1	الخا
Target @ 8620' TVD	8620.00	700.00	0.00	699.93	10.04	30	59	31.438	Ν	105	55	44	137	w
-Plan hit target														
Mule 24 Federal #1 PBHL	12100.00	1158.29	0.00	1158.17	16.61	30	59	35.973	Ν	105	55	44.	137	w
-Plan hit target														

Annotation

	MID ft	TVD ft	
ı	5630.41	5630.41	KOP @# 5630' w/ 2° Doglegs
ı	6380.41	6371.87	End of Build @ 15° Inclination
١	10000.00	9882.26	Allow Natural Drop to Vertical @ TD

Marbob Energy Corporation

Mule "24" Federal #1 Whirty bird 24 Federal #1 **Section 24, T24S & R25E**

Eddy County, New Mexico Plan #1 090605

COMPANY DETAILS



SECTION DETAILS TVD DLeg VSec Target 0.00 0.00 0.00 0.00 5630.41 0.00 0.00 5630.41 0.00 97.62 0.00 0.00 0.00 97.62 700.00 2.00 0.00 6380.41 15.00 0.00 6371.87 0.00 0.00 Target @ 8620' TVD Mule 24 Federal #1 PBHL 0.00 8620.00 0.00 360.00 12100.00 180.00

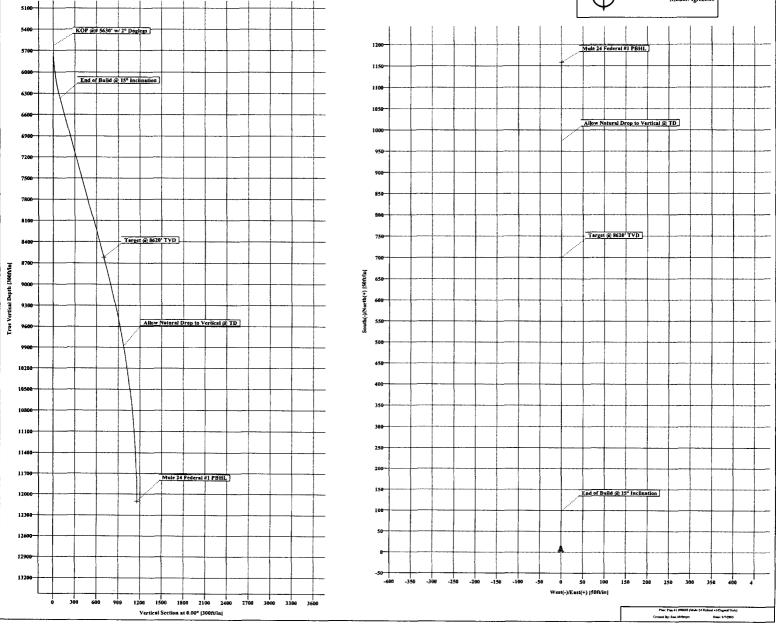
FIELD DETAILS

Mule Eddy County, New Mexico

Geodetic System: US State Plane Coordinate System 1927 Ellipsoid: NAD27 (Clarke 1866) Zone: New Mexico, Eastern Zone Magnetic Model: igrf2005

System Datum: Mean Sea Level Local North: True North





MARBOB ENERGY CORPORATION DRILLING AND OPERATIONS PROGRAM

WHIRLYBIRD 24 Federal #1 2600' FNL & 1150' FWL, Unit E Section 24, T24S, R25E Eddy County, New Mexico

In conjunction with Form 3160-3, Application for Permit to Drill subject well, Marbob Energy Corporation submits the following ten items of pertinent information in accordance with BLM requirements.

- 1. The geological surface formation is Permian.
- 2. The estimated tops of geologic markers are as follows:

Permian	surface	Atoka	11000
Capitan	315	Morrow	11600
Delaware	2592	TD	12100
Bone Spring	5600		
Wolfcamp	8700		
Strawn	10700		

3. The estimated depths at which anticipated water, oil or gas formations are expected to be encountered:

Capitan	315	Water
Delaware	2592	Oil
Bone Spring	5600	Oil
Wolfcamp	8700	Oil
Strawn	10700	Gas
Atoka	11000	Gas
Morrow	11600	Gas

No other formations are expected to give up oil, gas, or fresh water in measurable quantities. The surface fresh water sands will be protected by setting 9 5/8" casing at 2575' and circulating cement back to surface. Any shallower zones above TD which contain commercial quantities of oil and/or gas will have cement circulated across them by inserting a float shoe joint into the 5 1/2" production casing which will be run at TD to sufficiently cover all known oil and gas horizons above 200'.

4. Proposed Casing Program:

Hole Size	Interval	OD	Wt	Grade
		Casing		
17 1/2"	0-300' 300-2575' 2 ³	್ಷ;13 3/8″	48#	H-40 STC
12 ¼"	300-2 575 ′2 ³ ′	9 5/8"	36#	J-55 STC
8 3/ 4	4375-12100	. 5 1/2	17#	S-95 P-110
	2300' J.	רי		

Proposed Cement Program:

13 3/8" Surface Casing: Cement w/ 400 sk Class C. Circulate to surface.

9 5/8" Intermediate Casing: Cement w/ 550 sk Class C. Attempt to tie in to 13 3/8"

csg.

5 1/2" Production Casing: Cement w/ 600 sk Class C. Attempt to tie in to 9 5/8" csq.

200' above all oil and gas zones.

5. Minimum Specifications for Pressure Control:

Propose to nipple up on 13 3/8" casing with 2M system and test to 1000# with rig pumps, then nipple up on 9 5/8" casing with 5M system and test to 5000# with independent tester before drilling out of casing.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. A 2"kill line and a 3" choke line will be included in the drilling spool located below the ram-type BOP. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold with 5000 psi WP rating.

6. Mud Program: The applicable depths and properties of this system are as follows:

		Weight	Viscosity	Waterloss
Depth	Type	(ppg)	(sec)	(cc)
0 – 300′	Fresh Wtr (spud) Fresh Wtr	8.5	28	N.C.
300 - 257527	Fresh Wtr	8.5	28	N.C.
2575 - 12100' 7300' イケ	Cut Brine	8.6-9.4	28-36	N.C.
7300 55				

- 7. Auxiliary Equipment: Kelly Cock; Sub with full opening valve on floor; and drill pipe connections.
- 8. Testing, Logging and Coring Program:

No drillstem tests are anticipated.

The electric logging program will consist of Dual Laterolog Micro SFL, Spectral Density Dual Spaced Neutron Csng Log, and Depth Control Log. No conventional coring is anticipated.

- 9. No abnormal pressures or temperatures are anticipated.
- 10. Anticipated starting date: As soon as possible after approval.

MARBOB ENERGY CORPORATION MULTI-POINT SURFACE USE AND OPERATIONS PLAN

WHIRLYBIRD 24 Federal #1 2600' FNL & 1150' FWL, Unit E Section 24, T24S, R25E Eddy County, New Mexico

This plan is submitted with Form 3160-3, Application for Permit to Drill, covering the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of the surface disturbance involved and the procedures to be followed in rehabilitating the surface after completion of the operations, so that a complete appraisal can be made of the environmental effect associated with the operations.

1. EXISTING ROADS:

Exhibit 2 is a portion of a topo map showing the well and roads in the vicinity of the proposed location. The proposed wellsite and the access route to the location are indicated in red on Exhibit 2.

DIRECTIONS:

From the intersection of U.S. Highway #62-180 & Means Road (Co Rd #772). Go west on Means Road approx. 1.6 miles to proposed road survey. This location is approx. 429' north along the proposed road survey.

2. PLANNED ACCESS ROAD:

Proposed access road of 429' will be necessary.

- A. The average grade will be less than 3%.
- B. No turnouts are planned.
- C. No culverts, low-water crossings, cattleguards, fence cuts or gates are necessary.

3. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

A. Marbob Energy Corporation proposes a collection facility, if well is productive, to be located on Whirlybird 24 Federal #1 well pad.

4. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings will be disposed of in the lined pit.
- B. Drilling fluids will be allowed to evaporate in the lined pit until the pit is dry.

- C. Water produced during completion may be disposed into the lined reserve pit.
- D. All trash and debris will be removed from the wellsite within 30 days after finishing drilling and/or completion operations. All waste material will be contained to prevent scattering by the wind.

5. WELLSITE LAYOUT:

- A. Exhibit 3 shows the relative location and dimensions of the well pad, the pit.
- B. The reserve pit will be lined with high quality plastic sheeting.

6. PLANS FOR RESTORATION:

- A. After finishing drilling and/or completion operations, all equipment and other material not needed for further operations will be removed. The location will be cleaned of all trash and junk to leave the wellsite in as aesthetically pleasing a condition as possible.
- B. Reserve pit will be fenced until they have dried and been leveled.
- C. All rehabitation and/or vegetation requirements of the BLM will be complied with and will be accomplished as expeditiously as possible. All pits will be filled level within 90 days after abandonment.

7. SURFACE OWNERSHIP:

The well site and lease are located on Federal surface

- A. The area around the well site is composed rough, rocky hills with steep slopes and large canyon bottoms. Vegetation is comprised of that found within the chicuahaun desert and consists of Opuntia spp., soaptree yucca, Lechuguilla sotals, Beargrass, desert sumac, ocohllo, and a variety of grasses and fabs.
- B. A Cultural Resources Examination has been requested and will be forwarded to your office in the near future.

8. OTHER INFORMATION:

A. Topography: Refer to the existing archaeological report for a description of the topography, flora, fauna, soil characteristics, dwellings, historical and cultural sites.

9. OPERATOR'S REPRESENTATIVE:

A. Through A.P.D. Approval:

Ross Duncan, Landman Marbob Energy Corporation P. O. Box 227 Artesia, NM 88211-0227 Phone (505)748-3303 Cell (505)513-2544

B. Through Drilling Operations

Sheryl Baker, Drilling Supervisor Marbob Energy Corporation P. O. Box 227 Artesia, NM 88211-0227 Phone (505)748-3303 Cell (505)748-5489

10. CERTIFICATION:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite 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 Marbob Energy Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Date

Ross Duncan Landman

MARBOB ENERGY CORPORATION

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

I. HYDROGEN SULFIDE TRAINING

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:

- A. The hazards and characteristics of hydrogen sulfide (H_2S) .
- B. The proper use and maintenance of personal protective equipment and life support systems.
- C. The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
- D. The proper techniques for first aid and rescue procedures.

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

- A. The effects of H₂S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
- B. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
- C. 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 H₂S zone (within 3 days or 500 feet) and weekly H₂S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H₂S 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 H₂S 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 H₂S.

A. Well Control Equipment:

Flare line.

Choke manifold.

Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.

Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head.

B. Protective equipment for essential personnel:

Mark II Surviveair 30-minute units located in the dog house and at briefing areas.

C. H₂S detection and monitoring equipment:

2 - portable H₂S monitor positioned on location for best coverage and response. These units have warning lights and audible sirens when H₂S levels of 20 ppm are reached.

D. Visual warning systems:

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. See example attached.

E. Mud Program:

The mud program has been designed to minimize the volume of H₂S circulated to the surface.

F. Metallurgy:

All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H₂S service.

G. Communication:

Company vehicles equipped with cellular telephone and 2-way radio.

WARNING

YOU ARE ENTERING AN H₂S AREA AUTHORIZED PERSONNEL ONLY

- 1. BEARDS OR CONTACT LENSES NOT ALLOWED
- 2. HARD HATS REQUIRED
- 3. SMOKING IN DESIGNATED AREAS ONLY
- 4. BE WIND CONSCIOUS AT ALL TIMES
- 5. CK WITH MARBOB FOREMAN AT MAIN OFFICE

MARBOB ENERGY CORPORATION

1-505-748-3303

STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof, as described below:

Date:

September 7, 2005

Lease #:

NM 31636

Whirlybird 24 Federal #1

Legal Description: Sec. 24-T24S-R25E

BHL: 1980' FNL & 1150' FWL SL: 2600' FNL & 1150' FWL, Eddy County, New Mexico

Formation(s): Permian

Bond Coverage: Statewide

BLM Bond File #: 585716

Ross Duncan Landman

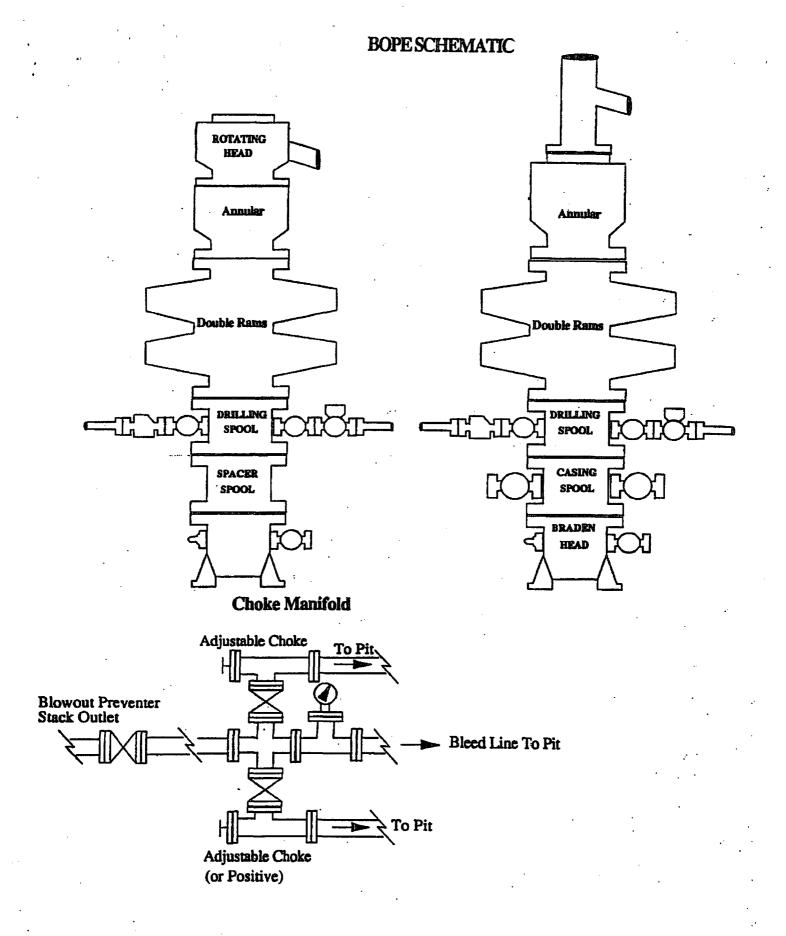
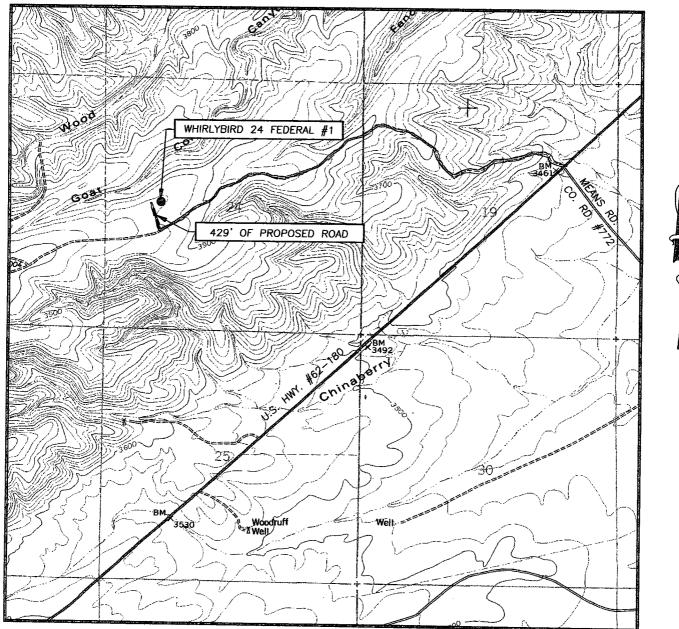


Exhibit One

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: BLACK RIVER VILLAGE, N.M. — 20'

SEU. <u>24</u> IW	/P. <u>24-S</u> RGE. <u>25-E</u>
SURVEY	N.M.P.M.
COUNTY	EDDY
DESCRIPTION_	2600' FNL & 1150' FWL
	3933'
OPERATOR	MARBOB ENERGY CORPORATION
LEASEWHIR	LYBIRD 24 FEDERAL
U.S.G.S. TOPO BLACK RIVER	



EXHIBIT TWO

Conditions of Approval for

Marbob Energy Corp. Whirlybird 13 #1, 23 #1, 24 #1 Lease # NM-31636

- 13 #1- Surface Hole: 330 FSL & 750 FEL, Section 13, T. 24 S., R. 25 E. Bottom Hole: 660 FSL & 750 FEL, Section 13, T. 24 S., R. 25 E.
- 23 #1- Surface Hole: 550 FSL & 2215 FWL, Section 23, T. 24 S., R. 25 E. Bottom Hole: 660 FSL & 1980 FWL, Section 23, T. 24 S., R. 25 E.
- 24 #1- Surface Hole: 2600 FNL & 1150 FWL, Section 24, T. 24 S., R. 25 E. Bottom Hole: 1980 FNL & 1150 FWL, Section 24, T. 24 S., R. 25 E.

Surface Mitigation

Whether or not a proposed activity has been relocated to reduce potential impacts on caves or karst, the following stipulations will applied to minimize the risk of impacts during construction, drilling and production.

- 1. NO PITS WILL BE ALLOWED: A closed mud system (steel tanks) will be utilized to drill all wells. All cuttings and fluids will be hauled off site for disposal.
- 2. Berms will be constructed around all storage tanks used in drilling or production to protect against spills.
- 3. A leak detection system will be installed for pipelines and tanks used in production or drilling.
- 4. A permanent 12 mil liner will be installed in storage tank areas.
- 5. The use of a stock tank vapor recovery system will be installed.
- 6. All production facilities, appurtenances, pipelines, and other above ground structures will be "low profile" (less than 8 feet in height) and painted a non-reflective (Flat) Shale Green.

Subsurface Mitigation

The following stipulations will be applied where the presence of caves or karst is obvious or expected, based on the results of detection efforts, and in lost circulation zones.

1. Rotary drilling techniques in cave or karst areas will include the use of fresh water as a circulating medium in zones where caves or karst features are expected. Sixteen (16)

ounces of Florescene dye will be added to the drilling fluid during the drilling of the first 2,500 feet of the well. Below those zones, the operator may use whatever drilling fluid is approved in the drilling plan.

- 2. Kick off for directional drilling will occur below 2,500 feet.
- 3. All casing will meet or exceed National Association of Corrosion Engineers specifications pertaining to the geology of the location and be run to American Petroleum Institute and BLM standards.
- 4. A cave protection casing will be required. The cave-protection casing string would be set at the base of the reef and where present at set it in the Lamar Limestone. (See Attached Diagram as an example of the Cave Protection String)
- 5. ALL lost circulation zones from the surface to 2,500 ft. will be logged and reported.
- 6. Regardless of the type of drilling machinery used, if a bit drops of four feet or more and circulation losses greater then 75 percent occur simultaneously while drilling in any cave-bearing zone, drilling operations will immediately stop and the BLM will be notified by the Operator. The BLM will assess the consequences of the situation and work with Operator on corrective actions to resolve the problem. If corrective actions fail, the well will be plugged. In the event that such an incident occurs contact Jim Goodbar at 505 234-5929 or 505 236-1016 after hours.
- 7. The casing will be cemented in place using one or a combination of any of the following methods that are environmentally sound, as determined by the BLM and the Operator:
 - A. If a large void is encountered, isolation from above and below rather than complete cement coverage of these zones could be employed. This would be accomplished by using stage cementing equipment, external packers, cement baskets, and one-inch remedial cementing techniques.
 - **B.** For a less severe lost circulation zone encountered while drilling, the operator will attempt to circulate cement to the surface using a single or multistage cementing job composed of a "lead and "tail" slurry for each stage. **C.** Foam cementing techniques will be used.

Any corrective actions proposed to resolve problems related to bit drops or lost circulation will require BLM concurrence prior to implementation. A decision on how to proceed will be reached within 24 hours of notification.

Monitoring Production Operations

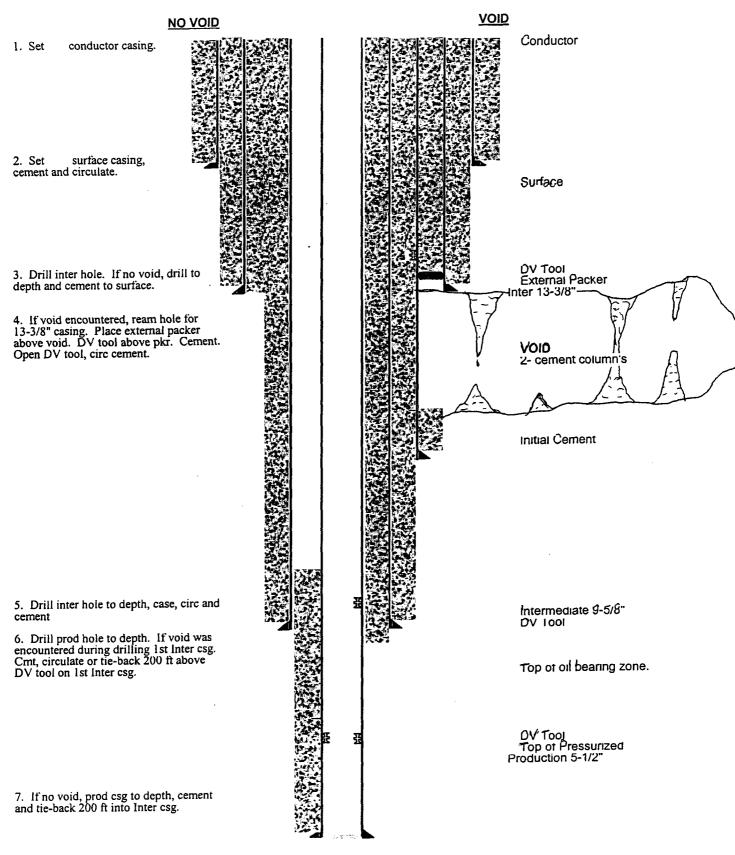
1. Annual pressure tests will be performed by the Operator on all casing annuli. If the test results indicated a casing failure, remedial actions approved by the BLM will be undertaken to correct the problem.

Record Keeping

- 1. The Operator will track customary drilling activities, including the rate of penetration, pump pressure, weight on bit, bit drops, percent of mud returns, and presence of absence of cuttings returning to the surface. As part of customary record keeping, each detectable void or sudden increase in the rate of penetration not attributable to a change in the formation type should be documented and evaluated as it is encountered.
- 2. The BLM may review data held by companies on wells drilled in cave or karst areas, to gain information about impacts to caves and karst. This information will be used to categorize lost-circulation zones on the basis of depth, relative volume, and severity, and to evaluate and compare the relative success or failure of different remedies attempted to combat lost-circulation problems while drilling and cementing casing in these zones. This information also will be used to update information about the occurrence of cave and karst features. Information concerning cave resources gathered during drilling will be submitted, as well, to retained by the BLM in accordance with The Carlsbad Field Office Cave Management Plan and the regulations implementing the Federal Cave Resources Protection Act.

WELLBORE SCHEMATIC

"CAVE PROTECTION"



CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Well Name & No. MARBOB ENERGY CORPORATION
1 – WHIRLYBIRD 24 FEDERAL

Location:

2600' FNL & 1150' FWL - SEC 24 - T24S - R25E - EDDY COUNTY (SHL) 1980' FNL & 1150' FWL - SEC 24 - T24S - R25E - EDDY COUNTY (BHL)

Lease:

NM-31636

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Roswell Field Office, 2909 West Second St., Roswell NM 88201, (505) 627-0272 for wells in Chaves and Roosevelt Counties; the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 234-5909 or (505) 361-2822 (After hours) - for wells in Eddy County; and the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:

A. Spudding

B. Cementing casing: <u>13-3/8</u> inch <u>9-5/8</u> inch <u>5-1/2</u> inch

C. BOP tests

- 2 Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
- 3. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.
- 4. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

II. CASING:

- 1. The <u>13-3/8</u> inch surface casing shall be set at <u>300 feet</u>, below usable water and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.
- 2. The minimum required fill of cement behind the <u>9-5/8</u> inch intermediate casing is <u>circulate cement to</u> the surface. Note: Because of the variability in identifying the Capitan Reef it was decided to set <u>9-5/8</u> inch casing at 2300 feet unless the mudlogger on location identifies the Delaware sands at a lesser depth. In this event the casing will be set at least 25 feet above the top of the Delaware sand.
- 3. The minimum required fill of cement behind the 5-1/2 inch production casing is cement shall extend upward a minimum of 500 feet above the uppermost hydrocarbon bearing interval.

III. PRESSURE CONTROL:

- 1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the 13-3/8 inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.
- 2. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling the surface and intermediate casing shall be <u>2000</u> psi. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling below the <u>9-5/8</u> inch casing shall be <u>5000</u> psi.
- 3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.
- The tests shall be done by an independent service company.
- The results of the test shall be reported to the appropriate BLM office.
- Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
- Testing must be done in a safe workman-like manner. Hard line connections shall be required.
- BOPE must be tested prior to drilling into the Wolfcamp Formation by an independent service company.

IV. DRILLING MUD:

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** Formation, and shall be used until production casing is run and cemented. Monitoring equipment shall consist of the following:

- 1. Recording pit level indicator to indicate volume gains and losses.
- 2. Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.
- 3. Flow-sensor on the flow line to warn of abnormal mud returns from the well.



November 1, 2005

Oil Conservation Division 1301 W. Grand Ave. Artesia, NM 88210

Attention: Bryan Arrant

Re: Whirlybird 24 Federal #1

2600' FNL & 1150' FWL Section 24 T-24S R-25E Eddy County, New Mexico

Dear Bryan:

We plan to complete this well in the Morrow which is sweet and <u>we don't</u> <u>anticipate cutting any formations that contain H2S gas</u> during the drilling of the above referenced well. Therefore, we do not believe that an H2S contingency plan is necessary.

If you have questions or need further information, please call.

Sincerely,

Melanie J. Parker Land Department

/mp



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop
Cabinet Secretary

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

November 1, 2005 Marbob Energy Corporation P.O. Box 227 Artesia, NM 88211

Attn: Melanie or to Whom It May Concern,

RE: Marbob Energy Corporation: Whirlybird '24' Federal #1, located in Unit E (2600' FNL & 1150' FWL surface location) in Section 24 of Township 24 South Range 25 East Eddy County, New Mexico.

Dear Melanie or To Whom It may Concern,

In regards with the conditions for approval of the above captioned well, the New Mexico Oil Conservation Division (NMOCD) will require the following:

This is for Marbob Energy Corporation Oil Company, to take samples from the flow line of the drilling mud every 100' in order to determine the chloride levels from the surface casing setting depth of @ 300' to the projected 9 5/8" intermediate casing setting depth of @ 2300'. Please note that we are aware that lost circulation in drilling of the reef may occur and the collection of samples may not be possible at times.

In addition, said well is to be drilled with a 'fresh water mud' system in the Capitan Reef from @ 220' to the setting depth of @ 2300' as stated in your APD.

The results of this data are to be submitted to the NMOCD and the Bureau of Land Management. Please call our office if you have any questions regarding this matter.

Respectfully yours,

Bryan G. Arrant

PES

CC:

Well File