JAMES BRUCE ATTORNEY AT LAW

POST OFFICE BOX 1056 SANTA FE, NEW MEXICO 87504

369 MONTEZUMA, NO. 213 SANTA FE, NEW MEXICO 87501

(505) 982-2043 (Phone) (505) 660-6612 (Cell) (505) 982-2151 (Fax)

jamesbruc@aol.com

October 14, 2004

David Catanach Oil Conservation Division 1220 South St. Francis Drive Santa Fe, New Mexico 87505

Re: Case No. 13,351/Application of Edge Petroleum Exploration Company/Dos Hermanos-Morrow Gas Pool

Dear Mr. Catanach:

At the hearing on this matter, held on October 7th, V-F Petroleum, Inc.'s witness, Mr. Mazullo, stated the following:

- 1. The well proposed by V-F in the NW¼ of Section 22 is a Strawn test, and thus is inapplicable to Edge's application; and
- 2. V-F opposes Edge's application because V-F simply wants to comply with existing pool rules.

Enclosed as Exhibit A is a portion of V-F's APD for its Hale Fed. Com. Well No. 3, in the NW¼ of Section 22. The well is permitted as a Morrow test in the Dos Hermanos-Morrow Gas Pool. Thus, Mr. Mazullo is incorrect about that well.

More importantly, the Section 22 well (i) is at an unorthodox bottomhole location (950' FNL & 760' FWL), and (ii) is an infill well. Enclosed as Exhibit B is Division Order No. R-11692, which approved V-F's request for exceptions to the rules for the Dos Hermanos-Morrow Gas Pool to (a) allow an unorthodox Morrow well location, and (b) permit a second well in the section. Exhibit C is the letter application related to the order. Based on the materials submitted to the Division:

A. V-F is not content to comply with pool rules when geology dictates otherwise;

RECEIVED

OCT 1 8 2004

OIL CONSERVATION DEVISION

- B. V-F has and will seek unorthodox Morrow locations, based on geological considerations, when necessary. This confirms what Mr. Mazullo inferred at the hearing, that the location for the new V-F well now being completed in the SW¼ of Section 21 was selected for geologic considerations. As a result, V-F is not harmed by Edge's anticipated location in the NE½NE½ of Section 29, because V-F drilled its geologically preferred location; and
- C. V-F believes that Morrow drainage is quite small (on the order of 40 acres), thus requiring infill drilling. Again, based on V-F's own assertions in Case No. 12746, the chances of Edge's anticipated location in the NE½NE½ of Section 29 harming V-F are minimal at most.

As stated at hearing, the rules for the Dos Hermanos-Morrow Gas Pool should be amended to conform to statewide rules (except to retain 640 acre spacing). V-F's data confirms this.

Edge requests that the Division take administrative notice of Case No. 12746.

Very truly yours,

James Bruce

Attorney for Edge Petroleum Exploration Company

cc: William F. Carr w/encl.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT Carlsbad Field Office

620 E. Greene St. Carlsbad, NM 88220-6292

In Reply Refer To: 3162.4 (080) NM-06784

SEP 2 2 2003



V-F Petroleum Inc. P-O-Box 1889 Midland, TX 79702

Gentlemen:

Your Application for Permit to Drill (APDs), for the following well has expired because drilling has not commenced within one year of the approval date as stated in the General Requirements for Oil and Gas Operations on Federal

NM-06784

Hale Federal Com #3

1450'/S & 660'/W

APD approved on 9/14/01, last approved extension expired on 9/14/03

A recent resubmission of the APD was received on September 17, 2003, at the same location.

Sincerely,

/s/ Joe G. Lara

FOR Mary Jo Rugwell Assistant Field Manager Lands & Minerals

NM (062, L. Askwig) OCD-Artesia I&E-CFO



Previously approved: 9/14/01 a						
Previously approved: 9/14/01 N. 1 year extension: to 9/14/03	M. Oil	Cons. DIV	-Dist.	2		_
L year extension: to 9/14/03 (August 1999)	301 V	Cons. DIV I. Grand A	venue	FORM OMB N Expires No	APPROVE (o. 1004-01) (ovember 30	36
RECEIVED DEPARTMENT OF THE IN	TENITAS	ia, NM 88	210	5. Lease Serial No		<u>.</u> •
OCT 2 9 2003 BUREAU OF LAND MANAC				6. If Indian, Allotte	e or Tribe	Name
APPLICATION FOR PERMIT TO DR	CILL OR F	REENTER		1		
Ia. Type of Work: DRILL REENTER	₹	R-111-POTAS	Н	7. If Unit or CA Ag	reement, N	ame and No.
1b. Type of Well; Oil Well Gas Well Other	O s	ingle Zone 🔲 Multi	ple Zone	8. Lease Name and Male Federal Com		o. 3
2. Name of Operator	SUBJEC	T TO LIKE		9_API Well No.	~~	`~~ U
VF Petroleum, Inc. 3a. Address	APRRO	ALEBY OF THE		30 - 0/5 - 33 07 Y		
	432-687-00		_	Dos Hermanos Morrow		
4. Location of Well (Report location clearly and in accordance with a				11. Sec., T., R., M., o		Survey or Area
At surface 1450' FSL & 660' FWL	•]		
(At proposed prod. zone 950' FNL & 760' FWL				Sec. 22-T20S-R30	F	
14. Distance in miles and direction from nearest town or post office*			· · · · · · · · · · · · · · · · · · ·	12. County or Parish		13. State
20 miles east of Carlsbad, NM				Eddy		NM
15. Distance from proposed* location to nearest property or lease line, ft.		Acres in lease	1	g Unit dedicated to this	well	
(Also to nearest drig, unit line, if any) 660' (760")	280	d Death	640	BIA Bond No. on file		
to nearest well, drilling, completed, applied for, on this lease, ft.	to nearest well, drilling, completed, annied for, on this lease, ft.					
21. Elevations (Show whether DF, KDB, RT, GL, etc.)		imate date work will s	tart*	23. Estimated durati	on	
3268' GL	Janua	ry 15, 2004		6 weeks		
	24. Atta	chments	CAPIT	IAN CONTROLLED WATER BASIN		
The following, completed in accordance with the requirements of Onshore	e Oil and Gas	Order No.1, shall be at	inched to this	form:		
Well plat certified by a registered surveyor. A Driffing Plan.		4. Bond to cover th Item 20 above). 5. Operator certific		s unless covered by an	existing 1	oond on file (sec
A Surface Use Plan (if the location is on National Forest System I SUPO shall be filed with the appropriate Forest Service Office).	Lands, the		pecific info	rmation and/or plans	as may be	required by the
25. Signature 6		Date				
Nedrait Amit			9/17/03			
Title				•		
Agent for: V-F Petroleum, Inc. Approved by (Signature)	' Name	(Printed/Tyned)			'Date	
Approved by (Signature) /s/ Linda S. C. Rundell		(Printed/Typed) S/ Li	nda S.	C. Rundell	22	DCT 2003
Title STATE DIRECTOR	Offic			OFFICE		
Application approval does not warrant or certify that the applicant holds is operations thereon. Conditions of approval, if any, are attached.	egal or equita	ble title to those rights in	-	lease which would entit APPROVAL		
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it States any false, ficultious or frandulent statements or representations as to	a crime for a any matter w	ny person knowingly ar vithin its jurisdiction.	d willfully t	o make to any departm	ent or ager	cy of the United
*(Instructions on reverse)		Q-11	69Z			
					£	
Lease Responsibility Statement: V-F Petroleum, concerning operations conducted on the leased la	, Inc. accep	its all applicable ter	ms, condí	tions, stipulations,	and restr	ictions
	•			WAS		
APPROVAL SUBJECT TO			Ge	orge R. Smith, age	nt	

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

					•		•				
ight i 25 N. French D	r., Hubbs, i	NM 88 349	State of New Mexico Energy, Minerals & Natural Resources				,	Revi	Form C-10 sed March 17, 199		
ches. H Sepuch Filmes, A ches. III				OIL CONSERVATION DIVISION 2040 South Pacheco					Submit to Appropriate District Offic		
TILLY.	ind., Amino, And Streets Santa Fe. NM 87500					M 87505		_	ee Lease - 3 Copt ENDED REPOR		
	-,		ELL LOC	CATIO	N AND	ACR	EAGE DEDIC	ATION PLA		icarded actor	
,	Of Hunds	H		Post Cu				red He lermanos M			
Property (inde .	HALP	PRDERAL	. com	7	reporty N				Well Number	
OGRID)	6.	- APLIA	EAVARA	000	'o	person là				Elevation	
		<u> </u>	ETROLE	IN IN						3268.	
er lat es.	Section	Township		Let Ma		reace L	ocation	Post from the	Eng/West Se	Count	
ها	22	20-S	30-E		145		SOUTE	660	West	RDDY	
			" Bott	om Ho	le Locat	ion If	Different From	Surface			
or lot me. D	Section 2.2	20-S	30-E	10 10	Post 8	50	Harris/Breath No.	Post from the	Tant/West No.		
Octobel Action		1 7 7 7	JU-E	4 14 6	rder No.	30	NORTH	760	West	Eddy	
640	1		Com	_ -						•	
	950 i		·	į				I hereby carefy #		FIFICATION stated funds to our and and balled	
760	6.	Bottom	ilole I	ocat i	on .						
m-0678	Å .		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					L be	Bralk	Smith	
		ı				- [<i></i>	ith, agent	
								Princed Nature V	-F Petrol	bum, Inc.	
								Tide Jun	e 27, 200	L	
VM-0636	0					+		SURVE	YOR CERT	TIFICATION	
									at the well location of patts of actual survey		
	ļ							or under try sape to the best of my		µm ४ एक माई व्यास्त	
60'								JUB	2001		
		<u> </u>						David Control	OF.		
1	l							17 /3	W	1	

APPLICATION FOR DRILLING

V-F PETROLEUM, INC.

Hale Federal Com., Well No. 3

Surface: 1450' FSL & 660' FWL, Sec. 22-T20S-R30E Production: 950' FNL & 760' FWL, Sec. 22-T20S-R30E

> Eddy County, New Mexico Lease No.: NM-06784 (Development Well)

In conjunction with Form 3160-3, Application for Permit to Drill subject well, V-F Petroleum, Inc. submits the following items of pertinent information in accordance with BLM requirements:

- 1. The geologic surface formation is recent Permian with quaternary alluvium and other surficial deposits.
- 2. The estimated tops of geologic markers are as follows:

Rustler	425'	Wolfcamp Limestone	10,293
Yates	1,778'	Middle Strawn Limestone	10,953'
Capitan Reef	2,319"	Atoka	11,243'
Delaware	3,653'	Morrow	11,688'
Bone Spring	6,450'	Lower Morrow	12,168'
Wolfcamp	10,124'	T.D	12,300

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

Water: Surface water between 100' - 300'.

Oil: None expected.

Gas: Possible in the Strawn below 10,953', Atoka below 11,243' and the Morrow below 11,688'.

4. Proposed Casing Program:

HOLE SIZE	CASING SIZE	WEIGHT	GRADE	JOINT	SEITING DEPTH	QUANTITY OF CEMENT
20"	16"	65.0#	H-40	ST&C	400'	Circ. 450 sx HL & 150 "C" to surface. WITNESS
15"	11 3/4"	42.0#	H-40	ST&C	750'	
15"	11 3/4"	47.0#	K-55	ST&C	-1:500"1745"	Circ. 1000 sx HL & 150 "C" to surface. WITNESS
10 5/8"	8 5/8 "	24.0#	K-55	ST&C	1,950*	
10 5/8"	8 <i>5/</i> 8"	32.0#	K-55	ST&C	- 3,900 ⁺3600′	Circ. 900 sx HL & 300 "C" to surface.
7 7/8"	5 1/2"	17.0#	N-80	LT&C	6,150'	
7 7/8"	5 1/2"	20.0#	N-80	LT&C	12,300'	750 sx "H" returned to 8,000'.

NOTE: Deviation Requirements: Commencing at 4,500', Kick off and build angle at 3 degrees per 100 feet. Drill and build curve section at 19 degrees to 9,500'. Natural drop section to near vertical at TD. See Exhibit "F".

5. Proposed Control Equipment: A 12" 5000 psi wp Shaffer Type LWS Double Gate BOP will be installed on the 11 3/4" casing. Casing and BOP will be tested according to Onshore Oil & Gas Order #2, not to exceed maximum surface estimated pressures of 2700 psi wp, before drilling out with 10 5/8" and will be tested weekly. See Exhibit "E".

61	MUD PROGRAM:		MUD WEIGHT	VIS.	W/L CONTROL
_	0' - 400':	Fresh water mud:	8.6 - 9.2 ppg	32 - 40	No W/L control
rresh	400' - 1500':	Brine water mud	10.0 - 10.1 ppg	28 - 29	No W/L control
Fresh		Brine water mud:	10.0 - 10.1 ppg	28 - 29	No W/L control
	3900' - 10,600':	Fresh water mud:	8.3 - 8.4 ppg	28 - 29	No W/L control
1	0,600' - 12,300':	Cut Brine mud:	9.8 - 10.0 ppg	36 - 40	W/L cont. 12 - to 6 cc in Morrow

^{7.} Auxiliary Equipment: Blowout Preventer, gas detector, Kelly cock, and stabbing valve.

V-F PETROLEUM, Inc. Hale Federal Com., Well No. 3 Page 2

8. Testing, Logging, and Coring Program:

Drill Stem Tests: None.

Logging: T.D. to 3900': GR-DNL-DLL

3900' to Surface: GR-

Coring: None planned

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. Estimated maximum BHP = 5412 and Surface Pressure =
2706 with a temperature of 183°.

10. H.S: None expected.

11. Anticipated starting date: January 15, 2004

Anticipated completion of drilling operations: Approximately 30 - 40 days.

P.07

MULTI POINT SURFACE USE AND OPERATIONS PLAN

V-F PETROLEUM INC.

Hale Federal Com., Well No. 3

Surface: 1450' FSL & 660' FWL, Sec. 22-T20S-R30E Production: 950' FNL & 760' FWL, Sec. 22-T20S-R30E

> Eddy County, New Mexico Lease No.: NM-06784 (Development Well)

This plan is submitted with the Application for Permit to Drill the above described well. The purpose of the plan is to describe the location of the proposed well, the proposed construction activities and operations plan, to be followed in rehabilitating the surface environmental effects associated with the operations.

1. EXISTING ROADS:

- A. Exhibit "A" is a portion of a USGS/BLM Topo map showing the location of the proposed well as staked. The well site location is approximately 17 road miles northeast of Carlsbad, New Mexico. Traveling east from Carlsbad there will be approximately 17 miles of paved highway and 2.8 miles of gravel ranch/oilfield roads.
- B. Directions: Travel east from Carlsbad, NM on U.S. Highway 62/180 for approximately 17 miles between MM# 54 & 55, .27 mile east of the NM Highway 31 turn off. Turn north at a V-F Petroleum sign onto a good gravel road paralleling a power line. Continue north for 1.6 miles; then NE for .5 mile; then north for .4 mile to a bend in the road 500 feet south of the Hale Fed. Com., Well No. 2 well pad. The start of the proposed access road is staked at this bend on the west side and will run north for 600 feet parallel to a two track beside a PNM gas pipeline. The proposed access road will then turn west for approximately 380 feet to the southeast corner of the proposed well site.

2. PLANNED ACCESS ROAD:

- A. Length and Width: The access road will be constructed to a width of 12 feet and will be approximately 1000 feet in length. The proposed access road is color coded red on Exhibits "A ".
- B. Construction: The proposed access road will be constructed by grading and topping with compacted caliche and will be properly drained.
- C. Turnouts: One turnout may be required at the midpoint, increasing the road width to 20 feet for passing.
- D. Culverts: None required.
- E. Cuts and Fills: None required except the leveling of small dunes.
- F. Gates, Cattle guards: None required.
- G. Off Lease R/W: None required.

LOCATION OF EXISTING WELLS:

A. Existing wells within a two-mile radius are shown on Exhibit "C".

V-F Petroleum Inc. Hale Federal Com., Well No. 3 Page 2

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES;

- A. There are gas production facilities on the lease at this time. The Hale Fed. Com., #2 is located 1650' FSL & 1800' FWL, Sec. 22-T20S-R30E is a producing gas well
- B. If the well proves to be commercial, the necessary production facilities, gas production-process equipment and tank battery, if required, will be installed on the drilling pad. A 4" O.D. grade J55 steel line with a test to 250#, to carry a maximum pressure of 125 psi, will be run on the surface approximately 800 feet east, parallel to the proposed access road, to the PNM pipeline, if PNM can handle the gas. A Sundry Report will be submitted for a line if the above is not feasible.

5. LOCATION AND TYPE OF WATER SUPPLY:

A. It is planned to drill the proposed well with fresh water that will be obtained from private or commercial sources and will be transported over the existing and proposed access roads.

6. SOURCE OF CONSTRUCTION MATERIALS:

A. Caliche for surfacing the proposed access road and well site pad will be obtained on location, if available, or from a Federal pit to be cleared in the NE½NW½ of Section 27-T20S-R30E. No surface materials will be disturbed except those necessary for actual grading and leveling of the drill site and access road.

7. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings will be disposed of in the reserve pits.
- B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.
- C. All pits will be fenced with normal fencing materials to prevent livestock and wildlife from entering the area.
- D. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or a separate disposal application will be submitted to the BLM for approval.
- E. Oil produced during operations will be stored in tanks until sold.
- F. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- G. Trash, waste paper, garbage and junk will be contained in trash bins to prevent scattering and will be removed for deposit in an approved sanitary landfill within 30 days after finishing drilling and/or completion operations.

8. ANCILLARY FACILITIES:

A. None required.

V-F Petroleum Inc. Hale Federal Com., Well No. 3 Page 3

9. WELL SITE LAYOUT:

- A. Exhibit "D" shows the relative location and dimensions of the well pad, reserve pits, and major rig components.
- B. Mat Size: 175' X 290', plus 110' X 120' reserve pits. The pits will be on the northeast.
- C. Cut & Fill: A 3 4 foot cut on the northwest with fill to the south and east.
- D. The surface will be topped with compacted caliche and the reserve pits will be plastic lined.

10. PLANS FOR RESTORATION OF THE SURFACE:

- A. After completion of drilling and/or completion operations, all equipment and other material not required for operations will be removed. Pits will be filled and the location cleaned of all trash and junk to leave the well site in an aesthetically pleasing a condition as possible
- B. Any unguarded pits containing fluids will be fenced until they are filled.
- C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible. All pits will be filled and leveled as soon as they are dry enough to work after abandonment.

11. OTHER INFORMATION:

- A. Topography: The proposed well site and access road is located on the south side of an east/west running hill. The location has a southeasterly slope of 3 4% from an elevation of 3268'.
- B. Soil: The topsoil at the well site is a moderately dark brown colored, weakly calcareous soil with caliche possible below four feet. The soil is of the Pajarito-Dune land complex Soils Series.
- C. Flora and Fauna: The vegetation cover is a sparse to fair grass cover of three-awn and other miscellaneous native grasses along with plants of mesquite, yucca, creosote bush, sage, shinnery oak brush, broomweed, cacti and miscellaneous weeds and wildflowers. The wildlife consists of rabbits, coyotes, rattlesnakes, lizards, dove, quail and other wildlife typical of the semi-arid desert land.
- D. Ponds and Streams: None except potash disposal ponds 1 1.5 miles to the south.
- E. Residences and Other Structures: None, but existing oil field facilities.
- F. Land Use: Cattle grazing and potash mines.
- G. Surface Ownership: The proposed well site and access road are on Federal surface.
- H. There is no evidence of archaeological, historical or cultural sites on the proposed 400' X 400'site and proposed access road right of way. Archaeological Survey Consultants, P. O. Box D, Roswell, NM 88202, are conducting an archaeological survey and their report will be submitted to the appropriate government agencies.

V-F Petroleum Inc. Hale Federal Com., Well No. 3 Page 4

12. OPERATOR'S REPRESENTATIVE:

A. The field representative responsible for assuring compliance with the approved surface use and operations plan is as follows:

Tom Beall V-F Petroleum Inc. P.O. Box 1889 Midland, TX 79702

Office Phone:

(432) 687-0008

Larry Brazile V-F Petroleum, Inc. P.O. Box 1889 Midland, TX 79702

Office Phone:

(432) 687-0008

13. CERTIFICATION:

I hereby certify that I have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in the 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 V-F Petroleum Inc. 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.

September 17, 2003

George R. Smith

Agent for: V-F Petroleum Inc.

STATE OF NEW MEXICO ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

> CASE NO. 12746 ORDER NO. R-11692

APPLICATION OF V-F PETROLEUM INC. L.L.C. FOR AN ORDER GRANTING EXCEPTIONS TO SPECIAL POOL RULES ESTABLISHED BY DIVISION ORDER NO. R. 3022, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on November 1, 2001, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this <u>26th</u> day of November, 2001, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner,

FINDS THAT:

- (1) Due public notice has been given and the Division has jurisdiction of this case and its subject matter.
- (2) By Order No. R-3022, as amended, entered in Case No. 3351 on December 22, 1965, the Division, upon application of Pan American Petroleum Corporation, established "Special Rules and Regulations for the Dos Hermanos-Morrow Gas Pool," These rules require standard 640-acre gas spacing and proration units with wells to be located no closer than 1650 feet to the outer boundary of the section and no closer than 330 feet to any governmental quarter-quarter section line or subdivision inner boundary. Additionally, these rules do not contain a provision authorizing the drilling of infill wells within a standard gas proration unit.
- (3) The applicant, V-F Petroleum Inc. L.L.C. ("V-F Petroleum"), seeks authority to drill its proposed Hale-Federal-Com-No. 3 as a second well on a standard 640-acre gas spacing and proration unit comprising all of Section 22, Township 20 South, Range 30 East, NMPM, Eddy County, New Mexico, to an unorthodox-bottomhole gas well location 950 feet from the North line and 760 feet from the West line (Unit D) of Section 22. The applicant further seeks authority to simultaneously dedicate this standard



640-acre spacing unit to the Hale Federal Com No. 3, and to its existing Hale Federal-Com No. 2 (API No. 30-015-20556) located at a standard gas well location 1650 feet from the South line and 1800 feet from the West line (Unit K) of Section 22.

- (4) This case was styled such that in the absence of objection, this case would be taken under advisement.
- (5) V-F Petroleum appeared through legal counsel. No other offset operator or interest owner appeared at the hearing.
- (6) Division records demonstrate that the Dos Hermanos-Morrow Gas Pool currently comprises Sections 21, 22, 27 and 28, Township 20 South, Range 30 East, NMPM.
 - (7) V-F Petroleum presented evidence that demonstrates:
 - the Hale Federal Com No. 2 is the only well currently producing from the Dos Hermanos-Morrow Gas Pool;
 - (b) as of October, 2000, the Hale Federal Com No. 2 has cumulatively produced approximately 1.186 BCF of gas from the Dos Hermanos-Morrow Gas Pool. Based upon volumetric calculations, the EUR for the well will be approximately 1.205 BCF of gas;
 - the Hale Federal Com No. 2 is estimated to ultimately drain an area of approximately 40 acres;
 - (d) the proposed Hale Federal Com No. 3 will be directionally drilled from a surface location 1450 feet from the South line and 660 feet from the West line (Unit L) of Section 22 to the proposed unorthodox bottomhole location due to surface considerations, namely the presence of a potash mine within the N/2 of Section 22; and
 - (c) a well drilled to the proposed unorthodox bottomhole=location_should_penetrate the Morrow formation in an area of greater sand thickness than a well drilled at a standard gas well location within

the NW/4 of Section 22, thereby increasing the likelihood of obtaining commercial gas production.

- (8) V-F Petroleum provided notice of its application to all affected offset operators. No offset operator or interest owner appeared at the hearing in opposition to the application.
- (9) Approval of the application will provide the applicant the opportunity to recover additional gas reserves from the Morrow formation underlying Section 22, thereby preventing waste, and will not violate correlative rights.

IT IS THEREFORE ORDERED THAT:

- (1) V-F Petroleum Inc. L.L.C. is hereby authorized to drill its Hale Federal Com No. 3 as a second well on a standard 640-acre gas spacing and proration unit in the Dos Hermanos-Morrow Gas Pool comprising all of Section 22, Township 20 South, Range 30 East, NMPM, Eddy County, New Mexico, to an unorthodox bottomhole gas well location 950 feet from the North line and 760 feet from the West line (Unit D) of Section 22.
- (2) The applicant is further authorized to simultaneously dedicate this standard 640-acre spacing unit to the Hale Federal Com No. 3, and to its existing Hale Federal Com No. 2 (API No. 30-015-20556) located at a standard gas well location 1650 feet from the South line and 1800 feet from the West line (Unit K) of Section 22.
- (3) Prior to commencing drilling operations, the applicant shall obtain all applicable approvals from the Division's Artesia District Office relating to the directional drilling operations for the Hale Federal Com No. 3.
- (4) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

nta Fe, New Mexico, on the day and year hereinabove designated.

CE

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

LORI WROTENBERY

Director

V-F Petroleum Inc.

550 W. Texas, Suite 230, Midland, Texas 79701

915/683-3344

915/683-3352FAX

Mailing Address: P.O. Box 1889, Midland, TX 79702

E-mail: vfmid@worldnet.att.net www.vfpetroleum.com

October 4, 2001

New Mexico Oil Conservation Division Engineering Bureau 1220 South St. Francis Drive Santa Fe, NM 87505

Re:

Application for Non Standard

Location

Hale Federal Com. Well No. 3 BHL 950'FNL & 760'FWL Section 22 – T20S – R30E

Dos Hermanos Field

Eddy County, New Mexico

Ladies and Gentlemen:

V-F Petroleum Inc. (V-F) is the Operator of the Hale Federal Com. Well No. 2 located in the Dos Hermanos (Morrow) Field and requests Administrative Approval to drill the Hale Federal Com. Well No 3, a second well to the Morrow Formation in Section 22 at a Non Standard Location. The Hale Federal Com. Well No. 2 is the only currently producing well in the Dos Hermanos Morrow Gas Pool. Order No. R-3022, adopted January 1, 1966, defined the Rules and Regulations for the Dos Hermanos Morrow Gas Pool. As such, the rules set the well spacing at 640 acres and that each well should be located no nearer than 1,650' feet from the outer boundary of the section line. Order No. R-3022 granted the applicant, Pan American Petroleum Corporation, their requested 640 acre spacing around their Emperor Federal Well No. 1 well largely on an economic argument that \$0.18 per mcf gas price did not allow any additional economic wells to be drilled, and that one well could efficiently drain 640 acres. Testimony was entered into record that the Emperor Federal Well No. 1 would calculate a drainage area of at least 640 acres if the perforated net pay of 43' was reduced to 14' of effective pay based upon drill stem test flow rate information. V-F suggests that over a longer period of time than a DST, most perforated intervals will contribute production, resulting in a drainage area significantly less than 640 acres. V-F requests an exception to Rule 2 (One wellper 640 acres) and Rule 4 (Section line spacing provision) for the following reasons:

Geological Considerations: Attachment No. 1 is a Structure Map of the Top of the Morrow Marker overlain by an isopach map of the middle Morrow pay interval. This map demonstrates that the optimum location to drain additional reserves from the Morrow Formation is at a location of 950'FNL & 760'FWL. Moving the bottom hole location westward would result in the Morrow Formation being low to the Hale Federal Com. Well



October 4, 2001 Dos Hermanos Field Eddy County, New Mexico

No. 2, and moving the bottom hole location eastward would result in a thinning Morrow section of pay. Attachment No. 2 is an East-West cross-section demonstrating the continuity of the Morrow pay intervals. Since this optimum location is less than 1,650' from the Western and Northern Boundary of Section 22 - T20S - R30E, an exception to Rule 4 is needed.

<u>Drainage Considerations</u>: Attachment No. 3 lists the results of drainage area estimates using volumetric calculations for the Morrow producers in the Dos Hermanos Field. Of particular interest to this application, the Emperor Federal Well No. 1 calculates a drainage area of 417 acres using an effective net pay of 39' based upon perforated intervals and log analysis. Since the historical drainage is substantially less than 640 acres per well, an exception to Rule 2 is needed to properly drain the existing reserves under Section 22 - T20S - R30E.

Additional Considerations: Attachment No. 4 lists the surrounding Operators, Leaseholders, or surface owners who have been contacted concerning this application. Attachment No. 5 is a plat of the general area surrounding the subject well. The Hale Federal Com. Well No. 3 is somewhat unusual in that it will be directionally drilled from a surface location at 1,450' FSL & 660' FWL due to numerous restrictions including a Potash Mine approximately ½ mile to the North and surface topography considerations. Attachment No. 6 is a copy of the directional well plan.

Yours very truly,

Larry N. Brazile

Vice President-Acquisitions