# DISTRIBUTION

# NEW MEXICO OIL CONSERVATION COMMISSION

Form C+104

	DESTRUCTION  SARTA SE  FILE  U.S.G.S.  L. 7D OFFICE  TRANSPORTER  GAS  OPERATOR  OPERATOR	- REQUEST FO	NSTRVATION COMMISSION OR ALLOWABLE AND ISPORT OIL AND NATURAL GA	Supersedes Old C-104 and C-1++ Effective 1-1-65
8 · L	PRODUCTION OFFICE OFFICE OFFICE OFFICE ARCO Oil and Gas Compared to the compar	ny, Division of Atlantic	c Richfield Company	
-		uite 501, Denver, Colora		
	Reason(s) for filing (Cleck proper box)  New We.i  Recompletion  Change in Ownership	Change in Transporter of: Oil Dry Gas Casinghead Gas Condens	Assumed name for Atlantic Richfiel	formerly
1	If change of ownership give name and address of previous owner			
11.	DESCRIPTION OF WELL AND LI Lease Name Horseshoe Gallup Unit Location	25 Horseshoe Gall	Up State, Federal	or FeeFed. 14-08-0001-8200
	Unit Letter H	1984 Get From The North Line		
	Line of Section 29 Town	ship 31N Range	16W , ммрм, San	Juan County
111.	DESIGNATION OF TRANSPORT  Name of Authorized Transporter of Oil  Water Injection Well  Name of Authorized Transporter of Casi		S Address (Give address to which approv Address (Give address to which approv	
	If well produces oil or liquids,	Unit Sec. Twp. Rge.	Is gus actually connected? Whe	n
	If this production is commingled with	h that from any other lease or pool,	give commingling order number:	Plug Back   Same Resty, Diff. Resty.
W	COMPLETION DATA  Designate Type of Completio	Oil Well Gas Well	New Well Workover Deepen	Plug Back   Same Resty, DIII, Resty,
	Dote Spudded	Date Compl. Reasy to Prod.	Total Depth	P.B.T.D.
	Elevations (DF, RKB, RT, GR, etc.)	Name of Producing Formation	Top Oil/Gas Pay	Tubing Depth
	Elevations (DF, RRS, RF, OR, city)			Depth Casing Shoo
	Perforations		ID CENERALING SECORD	
	HOLE SIZE	TUBING, CASING, AN	D CEMENTING DECORD  DEPTH SET	SACKS CEMENT
•	V. TEST DATA AND REQUEST FOR WELL  Date First New Cil Bun To Tenks	OR ALLOWABLE (Test must be able for this a	after recovery of inulivalume of load oil depth or be for full 24 hours)  Producing Mothaü (Flow, pump, gas l	and must be equal to or exceed top alic
	Length of Test	Tubing Pressure	Casing Pressure	Choke Size
	Actual Prod. During Tool	Oil-Bble.	Water - Bhls.	Gas-MC
	Actual Prod. Danie			
	GAS WELL Actual Prod. Tost-MCF/D	Length of Test	Bbls. Condensate2XMCF	Gravity of Condensate
	Testing Method (pitot, back pr.)	Tubing Pressure (Chut-in)	Casing Pressure (divt-in)	Choke Size
•	WI. CERTIFICATE OF COMPLIA		MAR 1	2 1979 . 19
	I hereby certify that the rules and Commission have been complied above is true and complete to t	d regulations of the Oil Conservation with and that the information give the best of my knowledge and belie	on l	
•	Accounting Supervis	anathre)	This formitto be filed in this is crequest for all well, this forment he accompant tests taken onthe well in accomplished on new addressed this form the on new addressed.	wells.
		(Date)	well name or mathor, or transport of the completed well.	. II, III, and VI for change of combits norter, or other such change of combits, i must be filed for each pool in multi, i

(NOVEMBER 1983)	IITED STATES	SUBMIT IN TRIPLICATES  (Other instructions on re-	Form approved. Budget Bureau Expires August	No. 1004-0135
(Formerly 9–331) DEPARTME	NT OF THE INTERIO	R verse side)	5. LEASE DESIGNATION	
BUREAU	OF LAND MANAGEMENT		14-20-603-734 6. IF INDIAN, ALLOTTE	1
SUNDRY NOTICE	S AND REPORTS OF	N WELLS	C. L. INDIAN, ILDUIIN	
(Do not use this form for proposals  Use "APPLICATIO	to drill or to deepen or plug back N FOR PERMIT—" for such prop	e to a dinerent reservoir.	Navajo	
			7. UNIT AGREEMENT NA	
	jection Wells		Horseshoe Gal	
ARCO Oil and Gas Compan	u Division of Atla	ntic Dichfield Co		
ARCO UTI and Gas Companiation	ly, DIVISION OF ACIA	ncie kiem leid co.	Horseshoe Gal	Tup
1816 E. Mojave, Farming	ton, New Mexico 87	401	25	
LOCATION OF WELL (Report location clear See also space 17 below.)	y and in accordance with any St	ate requirements.	10. FIELD AND POOL, O	R WILDCAT
At surface			Horseshoe Gal	
	•		11. SMC, T., R., M., OR I SURVEY OR AREA	BLE. AND
1980' FNL, 417' FEL			Sec. 29, T-31	IN D_16W
	5. BLEVATIONS (Show whether DF, R	t, CR. etc.)	12. COUPTY OR PARISE	18. STATE
	5984' GL		San Juan	N.M.
Check Appro	opriate Box To Indicate Nat	ture of Notice, Report, or C		
ROTICE OF INTENTIO			ENT EMPORT OF:	
		1	7	
	OR ALTER CISING	WATER SHUT-OFF FRACTURE TREATMENT	REPAIRING T	<del></del> ;
<del></del>	NDON*	BEOOTING OR ACIDIZING	ABANDONME	
REPAIR WELL CHA	NGE PLANS	(Other)		
(Other)		(NOTE: Report results Completion or Recompl	of multiple completion etion Report and Log fo	on Well rm.)
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SIGNED  (This space for Pederal or State office of Conditions of Approval, IP ANY	TITLE Pro	duction Supervisor		/87
<i>.</i> ~	•• • •	B 01	i John Kel	Cu'

Fo-merly 9-331)	UNITED STATES EPARTMENT OF THE INTER	SUBMIT IN TRIPLICATE (Other instructions on re		No. 1004-0135
	BUREAU OF LAND MANAGEMEN		14-20-603-	734
	Y NOTICES AND REPORTS		6. W INDIAN, ALLOTTE	BEAN DELET DO B
Um	a for proposals to drill or to deepen or plug a "APPLICATION FOR PERMIT—" for such	propertie.)	NAVAJO	
ART C ART C	Injection Well		HORSESHOE	
ARCO Oil and	Gas Company, Div. of Atla	ntic Richfield Co.	HORSESHOE	
1816 E. Moja	ve, Farmington, New Mexico	87401	9. WHLL BO. 25	
LOCATION OF WELL (Repor See also space 17 below.) At surface	t location clearly and in accordance with an	y State requirements.*	10. FIRLS AND POOL, O	
1980'FNL, 41'	7 ' ନନ:		11. soc., 2., 1., M., ce	SCE. AND
1300 182, 11	, , ,		SEC 29, T-	
4. PERMIT NO.	18. SLEYATIONS (Show whether to	og. st. og. etc.) 84 GL	12. COUPTY ON PARISE SAN JUAN	
6.	Check Appropriate Box To Indicate	Nature of Notice, Report, or	Other Data	
NOTICE	ES OF INTERTION TO:	SUBSE	QUEST REPORT OF:	
TEST WATER SEUT-OFF	PULL OR ALTER CASING	WATER SHUT-OFF	REPAIRING 1	ABIT
FRACTURE TREAT SHOOT OR ACIDIES	ABANGON*	PRACTURE TREATMENT	ALTREING C	-
REPAIR WELL	CHANGE PLANS	Other)	TRANSCRIE	<b>**</b>  -
(Other)		(Nors: Report result	n of multiple completion pletion Report and Log fo	es (₩ell
production.	status on this well. Over iously uneconomic long ter In addition, an ongoing C	m shut-in wells and f	ound commercial	
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\*See Instructions on Revene Side

(Formerly 9-331) DEPARTI	UNITED STATES MENT OF THE INTERI U OF LAND MANAGEMEN	_	Виdget Bureau No. 1004-0135 Expires August 31, 1985 • LEAGE DESIGNATION AND SERIAL NO. 14-20-603-734
SUNDRY NOT	ICES AND REPORTS ( Rails to drill or to deepen or plag I ATION FOR PERMIT—" for such p	ON WELLS back to a different reservoir. reposable.	Navajo
	Injection		7. UNIT AGREEMENT NAME Horseshoe Gallup Unit
ARCO 011 & Gas Company	, Division of Atlanti	ic Richfield Company	4. FARN OR LEADE MANS Horseshoe Gallup
1816 E. Mojave, Farming	gton, New Mexico 874	101	9. WHILE DO. 25
4. LOCATION OF WELL (Report location of See also space 17 below.) At surface	learly and in accordance with any	State requirementa.	10. FIRES AND POOL, OR WILDCAY Horseshoe Gallup
	10001 FNI 4 417	l se	STRYST OR AREA
14. PERMIT NO.	1980 FNL & 417		Sec. 29, T-31N, R-16W
	5980' GR		San Juan NM
16. Check A	poropriate Box To Indicate N	Nature of Notice, Report, or C	
NOTICE OF INTE		• •	THE BEFORE OF:
FRACTURE TREAT  SROOT OR ACIDIZE  REPAIR WELL	PCLL OR ALTER CISING MULTIPLE COMPLETE ABANDON* CHANGE PLANE  X	WATER SHUT-OFF FRACTURE TREATMENT SHOOTING OR ACIDIZING	ABANDONMENTO
(Other)	CHANGE PLANE	(Other) (NOTE: Report results Completion or Recogni	of multiple completion on Well etion Report and Log form.)
17 DESCRIBE PROPUSED OR COMPLETED OF proposed work. If well is direct nent to this work.) *	EATIONY (Clearly state all pertines onally drilled, give subsurface loca	it details, and give pertinent dates, Lions and measured and true vertics	including estimated date of starting any all depths for all markers and sones perti-
status on this well. economically operate t CO2 flooding for the H tional oil recovery(a the study to assess CO the workover of existi proposes that this wel bore will be available	At this time, under the subject well. An orseshoe Gallup Field CO <sub>2</sub> Pilot Project is a flooding potential ng wells, and the draintained in the should it be needed.	the current waterflood ongoing study to determined is underway, which me planned to begin latermined). Implementation of illing of new wells. The long term shut-in sections are to a future.	a CO <sub>2</sub> flood would require For this reason, ARCO status so that the well-
	THIS AGO	Frank Control Control	DEGEIVE AUG2 2 1988
			OIL CON. DIV.
18. I beredy certify that the foregoing s	•	roduction Supervisor	DATE 6/24/88
(This space for Federal or State of	le se)		AUG
APPROVED BY	ANT:	,	DATE DONALLE
	~ *See Instruction	is on Revenie Side	A CONTRACTOR OF THE CONTRACTOR

The first section of the

Form 3160-5 (June 1990)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

PORM	APPR	OVED
Budget Bur	nan No.	1004-0135
Expires	March	31, 1993

Experie: Marca 31, 893

14-20-603-734
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SUNDRY	NOTICES	AND	REPORTS	ON Y	VELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.

Use "APPLICATION FOR PERMIT—" for such proposals

Use "APPLICATION F	OR PERMIT—" for such proposals	NAVAJO
SUBM	IT IN TRIPLICATE	7. If Unit or CA, Agreement Designation
1. Type of Well Gas Other Injectio	on Well	HORSESHOE GALLUP UNIT  8. Wall Name and No.
ARCO Oil and Gas Company, (	Div. of Atlantic Richfield Co.	HORSESHOE GALLUP //, 25
3. Address and Telephone No.  1816 E. Mojave, Farmington 4. Location of Well (Footage, Sec., T., R., M., or Sarvey	, New Mexico 87401 (505) 325-75	27 10. Field and Pool, or Exploratory Area HORSESHOE GALLUP
		11. County or Parish, Suss
1980'FNL, 417'FEL	SEC 29, T-31N, R-16W	SAN JUAN NM
12. CHECK APPROPRIATE BOX	K(s) TO INDICATE NATURE OF NOTICE,	REPORT, OR OTHER DATA
' TYPE OF SUBMISSION	TYPE OF A	ACTION
Notice of Intent	Abandonment	Change of Plans
	Recompletion	New Construction

Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Long Term SI

ARCO Gil and Gas Company respectfully requests approval for extension of long term shut—in status on this well. ARCO continues to find ways to reactivate previously uneconomic long term shut—in wells and has returned several to production as market conditions and production allowed. As you are aware, ARCO is selling it's working interest in the Horseshoe Gallup Unit and the new owners are very interested in reactivating long term shut—in wells especially with the recent increase in oil prices. For these reasons, ARCO proposes that this well be maintained in the long term shut—in status so that the wellbore will be available, should future production tests indicate commercial production. This plan eliminates the economic waste of potentially usable wellbores and and promotes conservation.



		0011 ( 1990
14. I hereby certify that the foregoing is true and correct Signed	Title	Sr. Prod QIL CON. DIV.)
(This space for Federal or State office use)  Approved by	Title	ACCEPTED FOR RECORD
Conditions of approval, if any:		
Title 18 U.S.C. Section 1001, makes it a crime for any person knowing	ly and willfully to	make to any department or secure of the United States hery false firstnings or frauduless consequent

A STATE A STATE OF THE STATE OF

ations as to any matter within its jurisdiction

DISTRICT II P.O. Drawer DD, Artesia, NM 88210

OIL CONSERVATION DIVISION P.O. Box 2088

Santa Fe, New Mexico 87504-2088

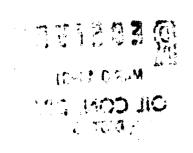
DISTRICT III 1000 Rio Brazos Rd., Aziec, NM 87410

REQUEST FOR ALLOWABLE AND AUTHORIZATION

Vantager Point Operating Company  Vantager Point Operating Company  S801 F. 41st, suite 1001, Thisn, Oklahoma 74135  S801 F. 41st, suit	,	HEUC	TOTRA	NSPC	ORT OIL	AND NA	TURAL GA	AS			
THE STATE OF STATE AND PROPERTY OF THE STATE OF STATE OF STATE AND PROPERTY OF STATE	perator							Well	API No. 3 <i>ስር</i>	145103	.92
SOLD E. A.1st., sulte 1001, Triling, Oklahoma 7A113  Cover (Phear explose)  Well  Consequence of Common and Consequence of Common and Consequence of Common and Commo	Vantage Point Ope	rating	Compan	V					200	710100	
Description of Well and Case Company. P.O. Box 1610. Nigland. Texas 79702  Surgestion of greater give name. According to Configurate Company. P.O. Box 1610. Nigland. Texas 79702  Description of Well and Case Company. P.O. Box 1610. Nigland. Texas 79702  Description of Well and Case Company. P.O. Box 1610. Nigland. Texas 79702  Description of Well and Case Company. P.O. Box 1610. Nigland. Texas 79702  Description of Well and Case Company. P.O. Box 1610. Nigland. Texas 79702  Description of Well and Case Company. P.O. Box 1610. Nigland. Texas 79702  Description of Well and Case Company. P.O. Box 1610. Nigland. Texas 79702  Description of Well and Case Company. P.O. Box 1610. Nigland. Texas 79702  Description of Well and Case Company. P.O. Box 1610. Nigland. Texas 79702  Description of Well and Case Company. P.O. Box 1610. Nigland. Texas 79702  Description of Well and Case Company. P.O. Box 1610. Nigland. Texas 79702  Licas No. Box 1600. Description of Well and Case Company. P.O. Box 1610. Nigland. Texas 79702  Licas No. Box 1600. Description of Well and Company. P.O. Box 1610. Nigland. Texas 79702  Licas No. Box 1600. Description of Company. P.O. Box 1610. Nigland. Texas 79702  Licas No. Box 1600. Description of Case Vell Incompany. P.O. Box 1610. Nigland. Texas 79707  Licas No. Box 1600. Description of Case Vell Incompany. P.O. Box 1610. Nigland. Texas 79707  Designate Type of Completion of Case Vell Incompany. P.O. Box 1610. Nigland. P.B. T.O. Description of Case Vell Incompany. P.O. Box 1610. Nigland. P.B. T.O. Description of Case Vell Incompany. P.O. Box 1610. Nigland. P.B. T.O. Description of Case Vell Incompany. P.O. Box 1610. Nigland. P.B. T.O. Description of Case Vell Incompany. P.O. Box 1610. Nigland. P.B. T.O. Description of Case Vell Incompany. P.O. Box 1610. Nigland. P.B. T.O. Description of Case Vell Incompany. P.O. Box 1610. Nigland. P.B. T. Description of Case Vell Incompany. P.O. Box 1610. Nigland. P.B. T. Description of Case Vell Incompany. P.B. T. Description of Case Vell Incompany. P.B. T. Desc	Adress	h. 1001	т., 1 с	o 01	laboma	74135					
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Cataghead Cas   Dr. Cataghead Cas   Condemne   Dr. Casa   Dr. Cataghead Cas   Condemne   Dr. Casa	lew Well		Change in		1 1			INJE	CTION	WELL	
TUBING, CASING AND CEMENTING RECORD  ARCO 011 and Gas Company, P.O. Box 1610, Midland, Texas 79702  above of princing pr	kecompletion			•	_			,			
DESCRIPTION OF WELL AND LEASE  ARE Name  ARE NOT LEASE  ARE NAME  AND LOCATED SHORE GAILUP UNIT.  BEST AND	mage in operation							11 . 1 . 7	707	702	
DESCRIPTION OF WELL AND LEASE  WAS Name  WAS Name  OUTS SENTING GAILUP UNIT  AS NOT SHARE SENT OF AND	od address of previous operator ARCO	Oil an	d Gas	Compa	ny, P.	O. Box ield Cor	1610, M10 mpany	olano, l	lexas 191	7.0.2	
Well No. [Pool Name, Including Permature   Sacra, Federal or Fee   14-20-603-734	L DESCRIPTION OF WELL	AND LE	ASE					1 20 . 4	-61	1.	- No
Unit Letter H 1980 Feet from The Line and H 7 Feet From The Line and H 8 Fe	Lease Name	_	Well Na	i							
Unit Letter   Section 2.9   Township 3.1 N Range 6.0 W NMPM San Juan County  DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS are of Authorized Transporter of Canagheed Gas or Coodennate   Address (Give achdess to which approved copy of this form is to be sent)  and of Authorized Transporter of Canagheed Gas or Dry Gas   Address (Give achdess to which approved copy of this form is to be sent)  will produce oil or liquids.   Unait   Sec.   Twp   Rge.   It gas actually connected?   When 7    the tectain of funds.   Unait   Sec.   Twp   Rge.   It gas actually connected?   When 7    the tectain of funds.   When 7    the tectain of funds.   Unait   Sec.   Twp   Rge.   It gas actually connected?   When 7    the tectain of funds.   When 7    the funds of funds.   When 8    The funds of funds.   When 8    Th			1 0 7	1101	sesnoe	<u>Gallup</u>				<del></del>	
Section of Township 3   N. Range   N. W. NADPAL.  DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS are of Authorized Transporter of Oil		_ :	180'	. Feet Fr	orn The	<u>N</u> _Lir		F ' ' F	eet From The	<u> </u>	Line
une of Authorized Transporter of OI	Section 29 Townsh	<sub>ip</sub> 31	N´	Range	161	<b>И</b> N	IMPM,	San Jua	an ————		County
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will production of changes of or liquids, we bear on the will product on the control tasks.  This production is commingled with that from any other lease or pool, give commingling order number:  COMPLETION DATA  Designate Type of Completion - (X)  Date Compl. Ready to Prod.  Total Depth  P.B.T.D.  Designate Type of Completion - (X)  Date Compl. Ready to Prod.  Total Depth  P.B.T.D.  Tubing Depth  P.B.T.D.  Tubing Depth  P.B.T.D.  Tubing Depth  Tubing Depth  HOLE SIZE  CASING A TUBING SIZE  DEPTH SET  SACKS CEMENT  TUBING, CASING AND CEMENTING RECORD  HOLE SIZE  CASING A TUBING SIZE  DEPTH SET  SACKS CEMENT  TUBING CASING AND CEMENTING RECORD  DEPTH SET  SACKS CEMENT  TUBING CASING SIZE  DEPTH SET  SACKS CEMENT  TUBING CASING SIZE  OCHANGE THIS Producting Pressure  Casing Pressure  Chick Size  OIL CON, DIV  Convert Size  OIL CONSERVATION DIVISION  Date of Test  Tubing Pressure (Shut in)  Tubing Pressure (Shut in)  OIL CONSERVATION DIVISION  Date Approved  FEB 2 7 1991  Supervisor District Fast  Title  Title  Title  Title  Title  Title  Title  Title	II. DESIGNATION OF TRAINAME OF Authorized Transporter of Oil	NSPURIE	or Conde	neste		Address (Gi	we address to w	vhich approve	d copy of this f	form is to be se	nt)
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CAS WELL  Actual Prod. Test - MCF/D  Length of Test  Tubing Pressure (Shut-in)  VI. OPERATOR CERTIFICATE OF COMPLIANCE  I hereby certify that the rules and regulations of the Oil Conservation  Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.  Printed Name  198 Gravity of Condensate/MMCF  Gravity of Condensate/M	Length of Test	Tubing I	ressure			Casing Pre	जास्त्र		Сьон		
CAS WELL  Actual Prod. Test - MCF/D  Length of Test  Tubing Pressure (Shut-in)  VI. OPERATOR CERTIFICATE OF COMPLIANCE  1 bereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.  Signature  Signature  Finted Name  1 101							Water - Bhis		Gas-MC	MADA	4 1004
GAS WELL Actual Prod. Test - MCF/D  Length of Test  Tubing Pressure (Shut-in)  Tubing Pressure (Shut-in)  Casing Pressure (Shut-in)  Choke Size  VI. OPERATOR CERTIFICATE OF COMPLIANCE  1 hereby certify that the rules and regulations of the Oil Conservation  Division have been complete with and that the information given above is true and complete to the best of my knowledge and belief.  Signature  Signature  Title	Actual Prod. During Test	Oil - Bb	ls.							MARU	± 1997
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I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.  Date Approved  FEB 2 7 1991  By  Supervisor District  Supervisor District  Title  1-19-91  918-664-7100  Title  Title  Title  Title	Testing Method (pitot, back pr.)	Tubing	Pressure (S	hut-in)		Casing Pri	casule (Seloc-III)				
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	1-19-91 Date					´					

INSTRUCTIONS: This form is to be filed in compliance with Rule 1104

- 1) Request for allowable for newly drilled or deepened well must be accompanied by tabulation of deviation tests taken in accordance with Rule 111.
- 2) All sections of this form must be filled out for allowable on new and recompleted wells.
- 3) Fill out only Sections I, II, III, and VI for changes of operator, well name or number, transporter, or other such changes.
- 4) Separate Form C-104 must be filed for each pool in multiply completed wells.



Form 3160-5 (June 1990)

## UNITED STATES

FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993

DEPARTMENT OF THE INTERIOR NEGLIVED	EXPITES: March 31, 1773
BUREAU OF LAND MANAGEMENT	5. Lease Designation and Serial No.
SUNDRY NOTICES AND REPORTS ON WELLS OF ALLO CO. STATE OF	14-20-693-734
SUNDRY NOTICES AND REPORTS ON WELLS  Do not use this form for proposals to drill or to deepen or feentry.	of It Indian, Allottee or Tribe Name
to a different reservoir.	<i>'</i>
Use "APPLICATION FOR PERMIT" for such proposats	y in Navajo
SUBMIT IN TRIPLICATE	7. If Unit or CA, Agreement Designation
1. Type of Well Oil Gas X Other Water Injection Well	Horseshoe Gallup Unit
Oil Gas XOther Water Injection Well	8. Well Name and No.
2 H	
2. Name of Operator Vantage Point Operating Company	Horseshoe Gallup Unit # 25
3. Address and Telephone No.	9. API Well No.
5801 E. 41st Street, Suite 1001, Tulsa, OK 74135 918-664-2100	3004510393
4. Location of Well (Footage, Sec., T., R., M., or Survey Discription)	10. Field and Pool, or Exploratory Area
1	Horseshoe Gallup
1980' FNL & 417' FEL 29-T31N-R16N	11. County or Parish, State
Chi.	
	1
	San Juan, New Mexico
DEPOS	T OR OTHER DATA
12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPOR	I, OR OTHER DATA
TYPE OF SUBMISSION	Change of Plans
Notice of Intent Abandonment	
Recompletion	New Construction
X Subsequent Report Plugging Back	Non-Rountine Fracturing
Casing Repair	Water Shut-Off
Final Abandonment Notice Altering Casing	Conversion to Injection
X Other LTSI	Dispose Water
	(Note: Report results of multiple
	completion on Well Completion or
	Recompletion Report and Log form.)
13. Describe Proposed or Completed Operations (Clearly state all pertinent deta	nils, and give pertinent dates, including
estimated date of starting any proposed work. If well is directionally dr	illed, give subsurface locations and
measured and true vertical depths for all markers and zones pertinent to the	nis work.)*
measured and true vertical depths for all markers and zones pertinent to a	
	Ventogo Boint
Vantage Point Energy requests approval for extension of long term shut-	in status on this well. Vantage route
assumed operations on the Unit during January, 1991, and has since acti	vated nineteen wells. Vantage Point is
viewing the feasibility of returning additional wells to active status	when the economics are favorable.
Also, this Unit has potential for CO2 flooding and for drilling addition	nal wells to tighten the injection
pattern. Extension of LTSI status would keep this wellbore available f	or future projects and would eliminate
economic waste and promote conservation.	
Committee Ruste and promote committee	

SEP 01 1992

4. I hereby certify that the foregoing	is true and	correct		
signed Uly Panlow	Titlë _	Sr. Production Engineer	Date	8/20/91
This space for Wederal or State of	fice use)			
Approved by Conditions of approval, if any:	Title .		<u>Da</u> te	

VANTAGE HORGESHOE GALLUP INJ # 025 H-29-31N-16W

### BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

CASE No. 2519

APPLICATION OF THE ATLANTIC REFINING COMPANY FOR A UNIT AGREEMENT, A PRES-SURE MAINTENANCE PROJECT AND THE RECLASSIFICATION OF TWO WELLS, SAN JUAN COUNTY, NEW MEXICO.

## ORDER OF THE COMMISSION

## BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on March 28, 1962, at Santa Fe, New Mexico, before Elvis A. Utz, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 18th day of April, 1962, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Elvis A. Utz, and being fully advised in the premises,

#### FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, The Atlantic Refining Company, seeks approval of the Horseshoe-Gallup Unit Agreement covering 20,925.58 acres, more or less, of Federal, State, Indian and fee lands in Townships 30 and 31 North, Ranges 16 and 17 West, San Juan County, New Mexico.
- (3) That approval of the proposed Horseshoe-Gallup Unit Agreement will, in principle, tend to promote the conservation of oil and gas and the prevention of waste.
- (4) That the applicant further seeks permission to institute the Horseshoe-Gallup Unit Pressure Maintenance Project in the Horseshoe-Gallup Oil Pool by the injection of water into the Gallup formation through 112 wells within the proposed project area.
- (5) That the applicant proposes that an administrative procedure be established whereby said pressure maintenance

-2-CASE No. 2519 Order No. R-2210

project may be expanded for good cause shown, and whereby additional wells in the project area may be converted to water injection.

- (6) That Special Rules and Regulations for the operation of The Atlantic Refining Company Horseshoe-Gallup Unit Pressure Maintenance Project should be promulgated and, for operational convenience, such rules should provide certain flexibility in authorizing the production of the project allowable from any well or wells in the project in any proportion, provided that no well in the project area which directly or diagonally offsets a well outside the project area producing from the same common source of supply should be allowed to produce in excess of top unit allowable for the Horseshoe-Gallup Oil Pool until such time as the well has experienced a substantial response from water injection. When such a response has occurred, the well should be permitted to produce up to two times top unit allowable for the Horseshoe-Gallup Oil Pool. Production of such well at a higher rate should be authorized only after notice and hearing.
- (7) That the applicant further seeks the reclassification of its Ute-Federal Well No. 1, located in the SW/4 SW/4 of Section 36, Township 31 North, Range 16 West, and its Navajo-Lowe-Federal Well No. 1, located in the NE/4 NE/4 of Section 2, Township 30 North, Range 16 West, all in San Juan County, New Mexico; from Verde-Gallup Oil Pool wells to Horseshoe-Gallup Oil Pool wells.
- (8) That the Verde-Gallup Oil Pool should be contracted by the deletion of the NE/4 NE/4 of Section 2, Township 30 North, Range 16 West, and the SW/4 SW/4 of Section 36, Township 31 North, Range 16 West, all in San Juan County, New Mexico.
- (9) That the Horseshoe-Gallup Oil Pool should be extended to include the SE/4 SE/4 of Section 35, Township 31 North, Range 16 West, San Juan County, New Mexico, in addition to the above-described acreage to be deleted from the Verde-Gallup Oil Pool.

#### IT IS THEREFORE ORDERED:

- (1) That the Horseshoe-Gallup Unit Agreement is hereby approved.
- (2) That the Plan under which the unit area shall be operated shall be embraced in the form of a unit agreement for the development and operation of the Horseshoe-Gallup Unit Area and such plan shall be known as the Horseshoe-Gallup Unit Agreement Plan.
- (3) That the Horseshoe-Gallup Unit Agreement Plan is hereby approved in principle as a proper conservation measure; provided however, that notwithstanding any of the provisions contained in

-3-CASE No. 2519 Order No. R-2210

said unit agreement, this approval shall not be considered as waiving or relinquishing, in any manner, any right, duty or obligation which is now, or may hereafter be, vested in the Oil Conservation Commission of New Mexico relative to the supervision and control of operations for the exploration and development of any lands committed to the said Horseshoe-Gallup Unit, or relative to the production of oil and gas therefrom.

That the unit area shall be: (a) (4)

#### NEW MEXICO PRINCIPAL MERIDIAN

TOWNSHIP 30 NORTH, RANGE 16 WEST Sections 2 through 6: All

Section 7: NE/4

Sections 8 and 9: All

Section 10: NW/4

That portion of the N/2 NW/4Section 16: lying east of the Navajo Indian Reservation

TOWNSHIP 31 NORTH, RANGE 16 WEST

Section 17: SW/4

Section 18: W/2 and SE/4

Sections 19 through 22: All

SW/4 Section 25:

Sections 26 through 35: All Section 36: W/2 and W/2 SE/4

TOWNSHIP 30 NORTH, RANGE 17 WEST NE/4Section 1:

TOWNSHIP 31 NORTH, RANGE 17 WEST

Sections 13 through 15: All

Section 16: E/2

NW/4 and E/2Section 22:

Sections 23 through 25: All

Section 26: E/2 and NW/4

Section 35: NE/4

Section 36: All

comprising 20,925.58 acres, more or less.

- (b) That the unit may be enlarged or contracted as provided in said Plan, provided however, that administrative approval for expansion or contraction of the unit area must also be obtained from the Secretary-Director of the Oil Conservation Commission.
- (5) That the unit operator shall file with the Commission an executed original or executed counterpart of the Horseshoe-Gallup Unit Agreement within 30 days after the effective date thereof. In the event of subsequent joinder by any party or

expansion of the unit area, the unit operator shall file with the Commission within 30 days of such action counterparts of the unit agreement reflecting the subscription of those interests having joined or ratified.

- (6) That this order shall become effective upon the approval of said unit agreement by the Commissioner of Public Lands for the State of New Mexico and by the Director of the United States Geological Survey and shall terminate ipso facto upon the termination of said unit agreement. The last unit operator shall notify the Commission immediately in writing of such termination.
- (7) That the applicant is hereby authorized to institute the Horseshoe-Gallup Unit Pressure Maintenance Project in the Horseshoe-Gallup Oil Pool, San Juan County, New Mexico, by the injection of water into the Gallup formation through 112 wells located within the project area as hereinafter-described.
- (8) That Special Rules and Regulations governing the operation of The Atlantic Refining Company Horseshoe-Gallup Unit Pressure Maintenance Project, San Juan County, New Mexico, are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS
FOR THE ATLANTIC REFINING COMPANY
HORSESHOE-GALLUP UNIT PRESSURE MAINTENANCE PROJECT

RULE 1. The project area of The Atlantic Refining Company Horseshoe-Gallup Unit Pressure Maintenance Project, hereinafter referred to as the Project, shall comprise the following-described acreage in San Juan County, New Mexico:

#### NEW MEXICO PRINCIPAL MERIDIAN

TOWNSHIP 30 NORTH, RANGE 16 WEST
Section 2: All
Section 3: All
Section 4: All
Section 5: N/2, SE/4, N/2 SW/4, SE/4 SW/4
Section 6: N/2 NE/4, SE/4 NE/4
Section 8: N/2 NE/4, SE/4 NE/4
Section 9: N/2, SE/4, N/2 SW/4, SE/4 SW/4
Section 10: NW/4
Section 10: NW/4
Section 16: NE/4 NW/4

TOWNSHIP 31 NORTH, RANGE 16 WEST
Section 19: S/2, NW/4, S/2 NE/4
Section 20: S/2

Section 19: S/2, NW/4, S/2 NE/4 Section 20: S/2 Section 21: S/2 Section 22: S/2 SW/4 Section 26: S/2 Section 27: S/2, NW/4, S/2 NE/4, NW/4 NE/4 TOWNSHIP 31 NORTH, RANGE 16 WEST - CONTINUED Section 28: A11 Section 29: All Section 30: All N/2, SE/4, N/2 SW/4, SE/4 SW/4Section 31: Section 32: A11 Section 33: All Section 34: All Section 35: All Section 36: W/2 SW/4 TOWNSHIP 31 NORTH, RANGE 17 WEST SW/4, S/2 SE/4, NW/4 SE/4, SW/4 NW/4 Section 13: Section 14: NE/4, N/2 NW/4, SE/4 NW/4, N/2 SE/4, Section 15: SE/4 SE/4Section 23: NE/4, N/2 NW/4, SE/4 NW/4, N/2 SE/4, SE/4 SE/4 Section 24: A11 N/2, SE/4, NE/4 SW/4 Section 25: NE/4 NE/4Section 36:

- RULE 2. The allowable for the Project shall be the sum of the allowables of the several wells within the project area, including those wells which are shut-in, curtailed, or used as injection wells. Allowables for all wells shall be determined in a manner hereinafter prescribed.
- RULE 3. Allowables for injection wells may be transferred to producing wells within the project area, as may the allowables for producing wells which, in the interest of more efficient operation of the Project, are shut-in or curtailed because of high gas-oil ratio or are shut-in for any of the following reasons: pressure regulation, control of pattern or sweep efficiencies, or to observe changes in pressures or changes in characteristics of reservoir liquids or progress of sweep.
- RULE 4. The allowable assigned to any well which is shut-in or which is curtailed in accordance with the provisions of Rule 3, which allowable is to be transferred to any well or wells in the project area for production, shall in no event be greater than its ability to produce during the test prescribed by Rule 6, below, or greater than the current top unit allowable for the pool during the month of transfer, whichever is less.
- RULE 5. The allowable assigned to any injection well on a 40-acre proration unit shall be top unit allowable for the Horse-shoe-Gallup Oil Pool.
- RULE 6. The allowable assigned to any well which is shut-in or curtailed in accordance with Rule 3, shall be determined by a 24-hour test at a stabilized rate of production, which shall be

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the final 24-hour period of a 72-hour test throughout which the well should be produced in the same manner and at a constant rate. The daily tolerance limitation set forth in Commission Rule 502 I (a) and the limiting gas-oil ratio (2,000 to 1) for the Horseshoe-Gallup Oil Pool shall be waived during such tests. The project operator shall notify all operators offsetting the well, as well as the Commission, of the exact time such tests are to be conducted. Tests may be witnessed by representatives of the offsetting operators and the Commission, if they so desire.

RULE 7. The allowable assigned to each producing well in the Project shall be equal to the well's ability to produce or to top unit allowable for the Horseshoe-Gallup Oil Pool, whichever is less, provided that any producing well in the project area which directly or diagonally offsets a well outside the project area producing from the same common source of supply shall not produce in excess of two times top unit allowable for the pool. Each producing well shall be subject to the limiting gas-oil ratio (2,000 to 1) for the Horseshoe-Gallup Oil Pool, except that any well or wells within the project area producing with a gas-oil ratio in excess of 2,000 cubic feet of gas per barrel of oil may be produced on a "net" gas-oil ratio basis, which net gas-oil ratio shall be determined by applying credit for daily average gas injected, if any, into the Horseshoe-Gallup Oil Pool within the project area to such high gas-oil ratio well. The daily adjusted oil allowable for any well receiving gas injection credit shall be determined in accordance with the following formula:

$$A_{adj} = \frac{\text{TUA} \times F_a \times 2,000}{\frac{P_g - I_g}{P_o}}$$

where:

A<sub>adi</sub> = the well's daily adjusted allowable

TUA = top unit allowable for the pool

F = the well's acreage factor

P = average daily volume of gas produced by the well during the preceding month, cubic feet

g = the well's allocated share of the daily average gas injected during the preceding month, cubic feet

p = average daily volume of oil produced by the
well during the preceding month, barrels

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In no event shall the amount of injected gas being credited to a well be such as to cause the net gas-oil ratio,  $\frac{P_g}{P_O}$ 

be less than 2,000 cubic feet of gas per barrel of oil produced.

RULE 8. Credit for daily average net water injected into the Horseshoe-Gallup Oil Pool through any injection well located within the project area may be converted to its gas equivalent and applied to any well producing with a gas-oil ratio in excess of two thousand cubic feet of gas per barrel of oil. Total credit for net water injected in the project area shall be the gas equivalent volume of the daily average net water injected during a onemonth period. The daily average gas equivalent of net water injected shall be computed in accordance with the following formula:

$$E_g = (V_{w \text{ inj}} - V_{w \text{ prod}}) \times 5.61 \times p_a \times 520^{\circ} \times 1$$
  
 $\frac{15.025}{T_r} = \frac{T}{Z}$ 

where:

E<sub>g</sub> = Average daily gas equivalent of net water injected, cubic feet

Vw inj = Average daily volume of water injected, barrels

V prod = Average daily volume of water produced, barrels

5.61 = Cubic foot equivalent of one barrel of water

P<sub>a</sub> = Average reservoir pressure at mid-point of the pay zones of Horseshoe-Gallup Oil Pool in project area, psig + 12.01, as determined from most recent survey

15.025 = Pressure base, psi

520<sup>O</sup> = Temperature base of 60<sup>O</sup>F expressed as absolute temperature

T<sub>r</sub> = Reservoir temperature of 87°F expressed as absolute temperature (547°R)

Z = Compressibility factor from analysis of Horseshoe-Gallup gas at average reservoir pressure, P<sub>a</sub>, interpolated from compressibility tabulation below:

Reservoir		Reservoir		Reservoir	
Pressure	Z	Pressure	$\mathbf{z}$	Pressure	Z
50	.9725	300	.8325	550	.6560
100	.9465	350	.8030	600	.6135
150	.9215	400	.7710	650	.5655
200	.8885	450	.7220	700	.5220
250	.8600	500	.6900	750	.4630
		•		800	.3935

RULE 9. Each month the project operator shall, within three days after the normal unit allowable for Northwest New Mexico has been established, submit to the Commission a Pressure Maintenance Project Operator's Report, on a form prescribed by the Commission, outlining thereon the data required, and requesting allowables for each of the several wells in the Project as well as the total Project allowable. The aforesaid Pressure Maintenance Project Operator's Report shall be filed in lieu of Form C-120 for the Project.

RULE 10. The Commission shall, upon review of the report and after any adjustments deemed necessary, calculate the allowable for each well in the Project for the next succeeding month in accordance with these rules. The sum of the allowables so calculated shall be assigned to the Project and may be produced from the wells in the Project in any proportion except that no well in the Project which directly or diagonally offsets a well outside the Project producing from the same common source of supply shall produce in excess of two times top unit allowable for the Pool.

- RULE 11. The conversion of producing wells to injection, the drilling of additional wells for injection, and expansion of the project area shall be accomplished only after approval of the same by the Secretary-Director of the Commission. To obtain such approval, the Project operator shall file proper application with the Commission, which application, if it seeks authorization to convert additional wells to injection or to drill additional injection wells shall include the following:
- (1) A plat showing the location of proposed injection well, all wells within the project area, and offset operators, locating wells which offset the project area.
- (2) A schematic drawing of the proposed injection well which fully describes the casing, tubing, perforated interval, and depth showing that the injection of gas or water will be confined to the Gallup formation.
- (3) A letter stating that all offset operators to the proposed injection well have been furnished a complete copy of the application and the date of notification.

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The Secretary-Director may approve the proposed injection well if, within 20 days after receiving the application, no objection to the proposal is received. The Secretary-Director may grant immediate approval, provided waivers of objection are received from all offset operators.

Expansion of the project area may be approved by the Secretary-Director of the Commission administratively when good cause is shown therefor.

- (9) That the applicant's Ute-Federal Well No. 1, located in the SW/4 SW/4 of Section 36, Township 31 North, Range 16 West, and Navajo-Lowe-Federal Well No. 1, located in the NE/4 NE/4 of Section 2, Township 30 North, Range 16 West, all in San Juan County, New Mexico, are hereby reclassified from Verde-Gallup Oil Pool wells.
- (10) That the Verde-Gallup Oil Pool, as heretofore classified, defined and described, is hereby contracted by the deletion of the SW/4 SW/4 of Section 36, Township 31 North, Range 16 West, and the NE/4 NE/4 of Section 2, Township 30 North, Range 16 West, all in San Juan County, New Mexico.
- (11) That the Horseshoe-Gallup Oil Pool, as heretofore classified, defined and described, is hereby extended to include the above-described acreage deleted from the Verde-Gallup Oil Pool and the SE/4 SE/4 of Section 35, Township 31 North, Range 16 West, San Juan County, New Mexico.
- (12) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

EDWIN L. MECHEM, Chairman

SEAL

E. S. WALKER, Member

esr/

A. L. PORTER, Jr., Member & Secretary