N.M. OIL CONS. COMMISSION P.O. BOX 1980 Form approved. Form 3160-5 November 1983) Budget Bureau No. 1004-0135 DEPARTMENT OF THE INTERIOR VOICE adds) Expires August 31, 1985 Formerly 9-331) 5. LEASE DESIGNATION AND SERIAL NO. BUREAU OF LAND MANAGEMENT 6. IF INDIAN, ALLOTTER OR TRIBE NAME SUNDRY NOTICES AND REPORTS ON WELLS (Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.

"APPLICATION FOR PERMIT—" for such proposals.) NM-0257272 DEC 13 7. URIT AGREEMENT NAME III JU AII OTHER 505 2. NAME OF OPERATOR S. FARM OR LEADE NAME A ... Phillips Petroleum Company Hat Mesa 3. ADDRESS OF OPERATOR 9. WHILL HO. 1 4001 Penbrook Street, Odessa, TX 79762 LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 10. PIBLD AND POOL, OR WILDCAT Hat Mesa-Morrow 11. SEC., T., R., M., OR BLK. AND SURVEY OR ARMA Tank Battery located at Hat Mesa Well No. 1 1980' FNL & 1979' FEL Sec.11, T-21-S, R-32-E 14. PERMIT NO. 15. BLEVATIONS (Show whether DF, RT, GR, etc.) 12. COUNTY OR PARISH 18. STATE NM 14. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF: TEST WATER SEUT-OFF PULL OR ALTER CARING WATER SHUT-OFF REPAIRING WELL PRACTURE TREAT MULTIPLE COMPLETE PRACTURE TREATMENT ALTERING CASING SHOOT OR ACIDIZE ARAMDON* SECOTING OR ACIDIZING REPAIR WELL CHANGE PLANS (Other) (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.) NTL2B (Other) 17. 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 some pertinent to this work.) Pleased be advised that the produced water from the Hat Mesa No. 1 will be disposed of as follows: The name of the produced water is Morrow. The amount of produced water from this well is expected to be less than 1 BWPD. A water analysis of the produced water is attached. Water is stored in a 210-barrel steel tank. Water will be moved to the disposal facility by trucks. The Operator of the facility is Phillips Petroleum Company. The facility is the James A St. No. 12W located in the SE 1/4 SE 1/4 of Sec. 2, T-22-S, R-30-E, Eddy The James A 12W water injection well is part of Phillips Petroleum Company's James A State Pressure Maintenance Project. The purpose of the project is to maintain reservoir pressure in the Delaware formation in the pilot area (SE 1/4 SE 1/4 of Sec. 2) in the Cabin Lake (Delaware) Field. Phillips received authorization for the project via NMOCD Order R-9500. 18. I hereby certify that the foregoing is true and correct 12-28-93 Supv.Regulatory Affairs TITLE 368-1488 (This space for Federal or State office use) 1/12/94

*See Instructions on Reverse Side

TITLE

PETROLEUM ENGINEER

APPROVED BY Orig Signed by Shannon J. Shaw

CONDITIONS OF APPROVAL IF ANY:



GP.O.BOX 2187 HOBBS, N.M. 88240 PHONE: (505) 393-7726

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WATER ANALYSIS REPORT

Report for: Randall Smith

cc: Scott Mallone cc: Pat Culpepper

CC:

Company: Phillips

Address:

Service Engineer: K. Kearney

Date sampled: 12-14-93 Date reported: 12-20-93

Lease or well # : Hat Mesa #1

County: State:

Formation:

Depth:

Submitted by: K. Kearney

CHEMICAL COMPOSITION :	mg/L	meq/L
Chloride (C1)	40	1
Iron (Fe) (total)	11.0	
Total hardness	50	
Calcium (Ca)	12	1
Magnesium (Mg)	4	0
Bicarbonates (HCO3)	134	2
	0	
Carbonates (CO3)	o	0
Sulfates (SO4)	1	-
Hydrogen sulfide (H2S)	320	
Carbon dioxide (CO2)	54	2.
Sodium (Na)	- ·	•
Total dissolved solids	245	
Barium (Ba)	0.3	
Strontium (Sr)	0	
	4 000	
Specific Gravity	1.000	
Density (#/gal.)	8.334	
pH	6.960	
IONIC STRENGTH	0.00	
Stiff-Davis (CaCO3) Stability Index :	
SI = pH	- pCa - pAlk - K	

SI @ 86 F = -0.60104 F = -0.38122 F = -0.15

140 F = +0.09

158 F = +0.33

This water is 2413 mg/l (%-100.00%) under ITS CALCULATED CaSO4 saturation value at 82 F.

SATURATION= 2413 mg/L PRESENT= 0 mg/L

REPORTED BY ROBERT C MIDDLETON TECHNICAL SERVICES REPRESENTATIVE



GP.O.BOX 2187 HOBBS, N.M. 88240 PHONE: (505) 393-7726

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WATER ANALYSIS REPORT

Date sampled: 12-14-93 Report for: Randall Smith Date reported: 12-20-93 cc: Scott Mallone

Lease or well # : Four Well Mix cc: Pat Culpepper

State: County:

cc: Formation: Company: Phillips Depth:

Address:

Submitted by: K. Kearney Service Engineer: K. Kearney

meq/L mg/L CHEMICAL COMPOSITION : 235 8328 Chloride (Cl) 22.0 . Iron (Fe) (total) 1425 Total hardness 13 251 Calcium (Ca) 16 194 Magnesium (Mg) 3 204 Bicarbonates (HCO3) 0 Carbonates (CO3) 0 10 Sulfates (SO4) 2 Hydrogen sulfide (H2S) 588 Carbon dioxide (CO2) 210 4838 Sodium (Na) 13825 Total dissolved solids 8.6 Barium (Ba) 33 Strontium (Sr) 1.009 Specific Gravity 8.409 Density (#/gal.) 6.983 pН 0.25 IONIC STRENGTH Stiff-Davis (CaCO3) Stability Index :

SI = pH - pCa - pAlk - K

SI @ 86 F = -0.53104 F = -0.31122 F = -0.06140 F = +0.21158 F = +0.49

This water is 3427 mg/l (-99.59%) under ITS CALCULATED CaSO4 saturation value at 82 F. PRESENT= 14 mg/L SATURATION= 3441 mg/L

> REPORTED BY ROBERT C MIDDLETON TECHNICAL SERVICES REPRESENTATIVE



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GP.O.BOX 2187 HOBBS, N.M. 88240 PHONE: (505) 393-7726

REPORT WATER ANALYSIS

Report for: Randall Smith

cc: Scott Mallone

cc: Pat Culpepper

cc:

Company: Phillips

Address:

Service Engineer: K. Kearney

Date sampled: 12-14-93 Date reported: 12-20-93

Lease or well # : Lost Tank H2O Sta.

State: County:

Formation:

Depth:

Submitted by: K. Kearney

CHEMICAL COMPOSITION :	mg/L	meq/L
Chloride (Cl)	175000	4937
Iron (Fe) (total)	4.0	
Total hardness	103000	
Calcium (Ca)	32080	1601
Magnesium (Mg)	5589	449
Bicarbonates (HCO3)	40	1
Carbonates (CO3)	0	
Sulfates (SO4)	149	3
Hydrogen sulfide (H2S)	0	
Carbon dioxide (CO2)	1097	
Sodium (Na)	66488	2891
Total dissolved solids	279347	
	2.8	
Barium (Ba)	857	
Strontium (Sr)		
Condific Cravity	1.199	
Specific Gravity	9.992	
Density (#/gcl.)	5.900	
pH	5.97	
IONIC STRENGTH	(CaCO3) Stability Index	•
Still-Davis	OH - pCa - pAlk - K	•
21 = 1	on - poa - park - k	
C.T.	0 86 F = +1.08	
51	104 F = +1.31	
	104 F = 41.51 122 F = +1.57	
	122 F = +1.37 140 F = +1.86	
	158 F = +2.18	

This water is 608 mg/l (-74.15%) under ITS CALCULATED CaSO4 saturation value at 82 F. PRESENT= 212 mg/L SATURATION= 820 mg/L

> REPORTED BY ROBERT C MIDDLETON TECHNICAL SERVICES REPRESENTATIVE



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Hat mesa A

Hat mesa Z

Bilbrev 24

Technologies, Inc.

During that mesa A

Hat mesa Z

Bilbrev 24 Hat Mesa Z W/ James Wares PHONE: (505) 393-7726

GP.O.BOX 2187 HOBBS, N.M. 88240

ANALYSIS REPORT WATER

Report for: Randall Smith

cc: Scott Malone

cc: Pat Culpepper

cc:

Company: Phillips

Address:

Service Engineer: K. Kearney

Date sampled: 12-14-93

Date reported: 12-20-93 Lease or well # : 10% Four Well Mix

State: County:

Formation: 90% Lost Tank H20

Depth:

Submitted by: K. Kearney

CHEMICAL COMPOSITION :	mg/L	meq/L
Chloride (Cl)	158333	4466
Iron (Fe) (total)	5.0	
Total hardness	93024	
Calcium (Ca)	28897	1442
Magnesium (Mg)	5050	405
Bicarbonates (HCO3)	56	1
Carbonates (CO3)	Ö	
	135	3
Sulfates (SO4) Hydrogen sulfide (H2S)	0	
Carbon dioxide (CO2)	1046	
	60322	2623
Sodium (Na) Total dissolved solids	252793	
	3.4	
Barium (Ba)	775	
Strontium (Sr)	,,,5	
cilla Cmanitu	1.180	
Specific Gravity	9.834	
Density (#/gal.)	6.256	
pH	5.40	
IONIC STRENGTH	CaCO3) Stability Inde	· ·
Still-Davis (Date - nalk - K	· A ·
S1 = pr	- pCa - pAlk - K	
Si	6 04 F - +1 19	
21	0.86 F = +1.19 104 F = +1.42	
	104 F = +1.42 $122 F = +1.68$	
	140 F = +1.97	
	158 F = +2.29	

This water is 540 mg/l (-73.87%) under ITS CALCULATED CaSO4 saturation value at 82 F. PRESENT= 191 mg/L SATURATION= 731 mg/L

> REPORTED BY ROBERT C MIDDLETON TECHNICAL SERVICES REPRESENTATIVE