



ANNUAL REPORT OF PRESSURE MONITORING, FLUID INJECTION AND ENHANCED RECOVERY

Complete all blanks - add pages if needed. Copy to be retained for five (5) years after filing date.

OPERATOR: License # _____
Name: _____
Address 1: _____
Address 2: _____
City: _____ State: _____ Zip: _____ + _____
Contact Person: _____
Phone: (_____) _____
Lease Name: _____
Well Number: _____

API No.: _____
Permit No.: _____
Reporting Year: _____
(January 1 to December 31)
____ - ____ - ____ - ____ Sec. ____ Twp. ____ S. R. ____ E W
(a/a/a/a)
_____ feet from N / S Line of Section
_____ feet from E / W Line of Section
County: _____

I. Injection Fluid:

Type (Pick one): Fresh Water Treated Brine Untreated Brine Water/Brine
Source: Produced Water Other (Attach list)
Quality: Total Dissolved Solids: _____ mg/l Specific Gravity: _____ Additives: _____
(Attach water analysis, if available)

II. Well Data:

Maximum Authorized Injection Pressure: _____ psi Injection Zone: _____
Maximum Authorized Injection Rate: _____ barrels per day
Total Number of Enhanced Recovery Injection Wells Covered by this Permit: _____ (Include TA's)

III.	Month:	Total Fluid Injected BBL	Maximum Fluid Pressure	Total Gas Injected MCF	Maximum Gas Pressure	# Days of Injection
	January	_____	_____	_____	_____	_____
	February	_____	_____	_____	_____	_____
	March	_____	_____	_____	_____	_____
	April	_____	_____	_____	_____	_____
	May	_____	_____	_____	_____	_____
	June	_____	_____	_____	_____	_____
	July	_____	_____	_____	_____	_____
	August	_____	_____	_____	_____	_____
	September	_____	_____	_____	_____	_____
	October	_____	_____	_____	_____	_____
	November	_____	_____	_____	_____	_____
	December	_____	_____	_____	_____	_____
	TOTAL	_____	_____	_____	_____	_____

NALCO Champion Water Analysis Report

An Ecolab Company

Attention: **Michael.Walters@CHAMP-TECH.com**

Location Code: **294906**

Sample ID: **A114312**

Login Batch: **170221100609**

Collection Date: **02/15/2017**

Receive Date: **02/21/2017**

Report Date: **02/22/2017**

Customer: **H&M Petroleum Corporation (1508375)**

Region: **Not Available**

Location: **Scott County, KS**

System: **Production System**

Equipment: **Well French #1 SWD**

Lab ID: **ABU-0055**

Sample Point: **Water Tank**

Analyses	Result	Unit
Dissolved CO2	158	mg/L
Dissolved H2S	20	mg/L
pH	6.8	
Pressure	10	psi
Temperature	89	° F

Analyses	Result	Unit
Bicarbonate	205	mg/L
Conductivity (Calculated)	90293	µS - cm3
Ionic Strength	1.06	
Resistivity	0.111	ohms - m
Specific Gravity	1.037	
Total Dissolved Solids	57788.32	mg/L

Cations	Result	Unit
Iron	0.709	mg/L
Manganese	0.111	mg/L
Barium	0.055	mg/L
Strontium	28.01	mg/L
Calcium	942.2	mg/L
Magnesium	331.0	mg/L
Sodium	20670.23	mg/L

Anions	Result	Unit
Chloride	31130	mg/L
Sulfate	4481	mg/L

Scale Type	Result
Anhydrite CaSO4 SI	-0.52
Barite BaSO4 SI	-0.04
Calcite CaCO3 SI	-0.78
Celestite SrSO4 PTB	1.8
Celestite SrSO4 SI	0.04
Gypsum CaSO4 SI	-0.33
Hemihydrate CaSO4 SI	-0.31
Saturation Index Calculation (Tomson-Oddo Model)	

Comments

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