

FORMATION WATER

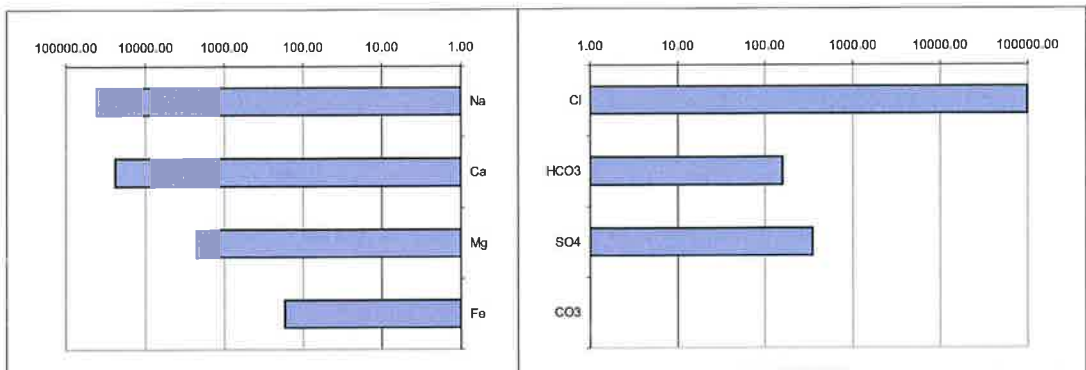
PROJECT NO. :	201405052	ANALYSIS NO. :	01
COMPANY NAME :	NIGHTHAWK PRODUCTION	ANALYSIS DATE:	MAY 14, 2014
ACCOUNT NO. :		SAMPLE DATE :	MAY 7, 2014
PRODUCER :		CYLINDER NO. :	MISC.
LEASE NO. :		SAMPLED BY :	BURL MCENDREE
NAME/DESCRIP :	ARIKAREE CREEK #ISWD @ 4:30 P.M.		EMPACT

*****FIELD DATA*****

SAMPLE PRES. :
 COMMENTS : SPOT

SAMPLE TEMP. :
 AMBIENT TEMP.:

<u>PARAMETER</u>	<u>METHOD</u>	<u>DETECTION LIMIT</u>	<u>REPORTED RESULTS/UNITS</u>	
Ammonia Nitrogen	SM 4500-NH3-G	0.03	27.68	mg/L
Bicarbonate	SM 2320-B	0.1	159.50	mg/L
Boron	SM 4500-B B	0.01	35.60	mg/L
Calcium - Total	SM 3111-B	0.1	24050.00	mg/L
Calcium - Hardness	SM 3111-B	0.1	60052.80	mg/L as CaCO ₃
Carbonate	SM 2320-B	0.1	BDL	mg/L
Chloride	EPA 300.0	0.01	99085.60	mg/L
Iron - Total	SM 3111-B	0.005	173.40	mg/L
Magnesium - Total	SM 3111-B	0.1	2264.00	mg/L
Nitrate Nitrogen	EPA 300.0	0.02	2.68	mg/L
pH	SM 4500-H-B	0.01	6.00	units
Potassium - Total	SM 3111-B	0.1	1524.00	mg/L
Resistivity @ 77° F	SM 2520 B	0.01	0.06	ohm.m
Sodium - Total	SM 3111-B	0.1	40370.00	mg/L
Sodium Adsorption Ratio	SM 3111-B	0.1	66.70	units
Specific Gravity	SM 2710 F	0.001	1.02	g/ml
Sulfate	EPA 300.0	0.01	347.99	mg/L
Total Alkalinity	SM 2320-B	0.1	130.70	mg/L as CaCO ₃
Total Dissolved Solids	SM 2540-C	5	182253.00	mg/L



BDL = Below Decton Limit

mg/L = Milligram Per Liter or ppm (wt/vol); ug/L = Micrograms Per Liter or PPB (wt/vol)
 SM = "Standard Methods for the Examination of Water and Wastewater", APHA, 19th Edition, 1995
 EPA = "Methods of Chemical Analysis of Water and Wastes", USEPA, EPA-600/4-79-020 rev 3/83

THE DATA PRESENTED HEREIN HAS BEEN ACQUIRED THROUGH JUDICIOUS APPLICATION OF CURRENT STATE-OF-THE ART ANALYTICAL TECHNIQUES. THE APPLICATIONS OF THIS INFORMATION IS THE RESPONSIBILITY OF THE USER. EMPACT ANALYTICAL SYSTEMS, INC. ASSUMES NO RESPONSIBILITY FOR ACCURACY OF THE REPORTED INFORMATION NOR ANY CONSEQUENCES OF IT'S APPLICATION.