

WATER ANALYSIS
NORTHERN REGION DENVER TECHNICAL CENTER

SAMPLE I.D.:

CHEVRON 138Y-28 UPRR RANGELY
RIO BLANCO CNTY., CO. T 2N, R 102W, SEC. 28
WEBER
09-12-88 WELL HEAD

SAMPLE NUMBER:01W4143

MAJOR ANIONS	MG/L	MEQ/L	MAJOR CATIONS	MG/L	MEQ/L
CL	20300.00	572.7	NA	11500.00	500.3
BR	87.60	1.1			
I	3.30	0.0			
SO4	313.00	6.5	CA	891.00	44.5
HCO3	491.00	8.0	MG	163.00	13.4
CO3	0.00	0.0	K	292.00	7.5
OH	0.00	0.0	SR	81.50	1.9
SUM= 588.3			SUM= 567.4		

ANION/CATION QC (DIFF/SUM) = [.0181]

TOTAL DISSOLVED SOLIDS BY ADDITION (OF IONS ANALYZED) = 34122.4 MG/L

MEAS. RES. @ 77 F = .197 OHM-M CALC. RES. @ 77 F = .184 OHM-M

MEAS. RES. @ 158 F = .102 OHM-M CALC. SP. GRAV.= 1.024 G/ML

PH OF UNACIDIFIED SAMPLE @ 25 C = 7.47 UNITS

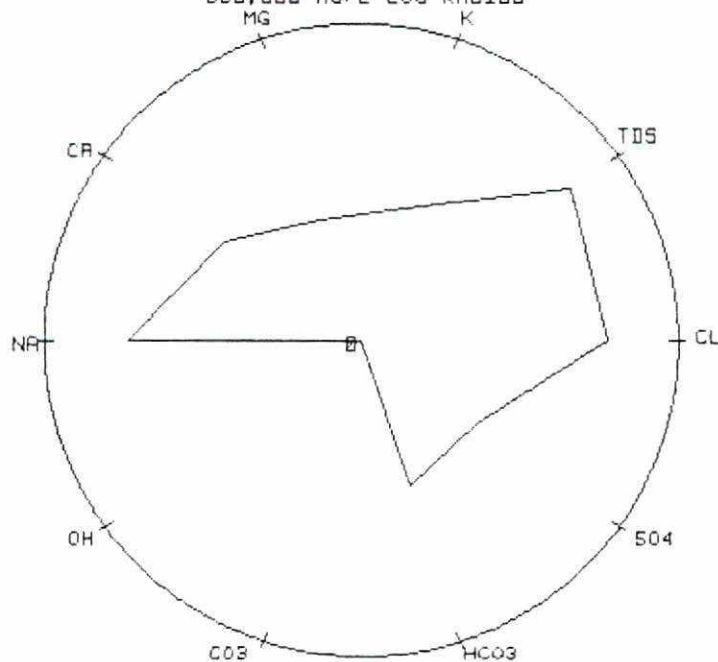
NITRATE = 0 MG/L

A VALUE OF 0 INDICATES <NONE DETECTED>

WATER ANALYSIS STARPLOT

350,000 MG/L LOG RADIUS

BARIUM=1.65mg/l
 IRON=0.55mg/l
 LITHIUM=10.2mg/l
 RUBIDIUM=NDmg/l
 CESIUM=NTmg/l
 MANGANESE=0.57mg/l
 ZINC=NDmg/l
 COPPER=NDmg/l
 SILICON=18.3mg/l
 BORON=10.1mg/l
 ALUMINUM=NDmg/l
 CHROMIUM=NDmg/l
 LEAD=NDmg/l
 NT - NOT TESTED



REQUEST FOR PTC, CAP, OR WATER ANALYSIS

(CIRCLE ANALYSIS REQUIRED)



Chevron U.S.A. Inc.
Northern Region

ANALYSIS PRIORITY: URGENT ☐ ROUTINE ☐ DATE RESULTS NEEDED _____

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80										
LAB SAMPLE NUMBER										RECORD KEY										UPDATE CODE										API WELL NUMBER										OPERATOR										LEASE																																							
D11W										2417										01										05										103										09173										00										CHEVRON										UPRR									

WELL NUMBER										FIELD/AREA										COUNTY										ST		TOWNSHIP N/S										RANGE E/W										SECTION																											
02										138Y-20										RANGELY										RIO BLANCO										CO		T 2 N										R 102 W										S 28																	
(USE -.5 FOR PARTIAL TOWNSHIP OR RANGE)																																																																															

OIL ANALYSES:

1) PTC: PROGRAMMED
TEMPERATURE
CHROMATOGRAPHY
(C-1 THRU C-18)

2) CAP(FSCOT):
CAPILLARY
CHROMATOGRAPHY
(C-8 THRU C-40)

UPDATE CODE		REGION										DEPT		EXP DIV		D G		DISTRICT (EXPL. ONLY)										PROD # DG DIV		FORMATION CODE										SAMPLING DATE										TWIN SAMPLE										LYMAN SER.											
03		X										X																X		419WEBR										10-23-86																															
NEW		WELL										EXPL		M-C				OK										OK		DEN										MONTH										DAY										YEAR											

SAMPLED INTERVAL										SAMPLED FORMATION										FLY BLK		GEOLOGIC AGE										TEST TYPE									
04										5617-6243												X										X									
NEW										WEBER												PLE										PTC									

SAMPLE SOURCE										PROD METHOD										CURRENT PRODUCTION									
05										WELL HEAD										BOPD									
WELL HEAD, DST/FT, SWAB, ETC.										FLOW, PUMP, ETC.										BOPD									

REMARKS (PURPOSE OF SAMPLE, ETC.)																																																																															
06 ONLY SENT IN ACID SAMPLE																																																																															

DST RECOVERY										FT / RFT RECOVERY										SWAB RUN		SWAB RECOVERY									
07																															
FEET OIL										CC OIL												CC MUD									

SAMPLE, WELL OR MUD TREATED ? (FIELD ONLY)										SAMPLE TREATED (LAB ONLY)										% BSW, LAB	
08																					
MATERIAL										MATERIAL											

API GRAVITY, FIELD										R _m (FIELD)										CHLORIDE (FIELD)										SAMPLED BY										API GRAVITY, LAB										QUALITY CODE										DATE RECEIVED IN LAB										DATE RUN									
09										3																																																		11-05-86										01-26-87									
MONTH										DAY										YEAR										MONTH										DAY										YEAR																													

SUBMITTED BY: _____

SEND COPY(IES) TO: _____

CHEVRON NORTHERN REGION LABORATORY
700 SOUTH COLORADO BLVD.
GLENDALE (DENVER), COLORADO 80222

WATER ANALYSIS GEOSCIENCE LABORATORY



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Northern Region

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LAB SAMPLE NUMBER												CHLORIDE												SODIUM												LITHIUM												SILICON												SAMPLE RECEIVED												ANALYSIS COMPLETED																																															
01W 2417												NT												10500																																				11-05-86												01-26-87																																															
												HG / L												MEQ / L												HG / L												MEQ / L												HG / L												MEQ / L												MONTH DAY YEAR												MONTH DAY YEAR																							
11												BROMIDE												CALCIUM												RUBIDIUM												BORON												RESISTIVITY												RESISTIVITY																																															
NT												NT												950																																				NT												77												NT																																			
												HG / L												MEQ / L												HG / L												MEQ / L												HG / L												MEQ / L												*F												*F																							
12												IODIDE												MAGNESIUM												CESIUM												ALUMINUM												TOTAL DISSOLVED SOLIDS												TDS ERROR																																															
NT												NT												142																																																																																															
												HG / L												MEQ / L												HG / L												MEQ / L												HG / L												MEQ / L												BY EVAPORATION												BY ADDITION																							
13												SULFATE												POTASSIUM												MANGANESE												CHROMIUM												pH												SPECIFIC GRAVITY																																															
NT												NT												239																																				NT												25												NT																																			
												HG / L												MEQ / L												HG / L												MEQ / L												HG / L												MEQ / L												*C												*F																							
14												BICARBONATE												STRONTIUM												ZINC												LEAD												LAB NOTES																																																											
NT												NT												105																																																																																															
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												HG / L												MEQ / L												HG / L												MEQ / L												ACIDIFIED SAMPLE																																																											

NOTES:

THE ABOVE DETERMINATIONS
WERE MADE IN THE
UNTREATED SAMPLE.

THE ABOVE DETERMINATIONS WERE
MADE IN THE ACIDIFIED SAMPLE.

CAUTION: ANALYTICAL ACCURACY NEVER EXCEEDS THREE SIGNIFICANT FIGURES.

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LAB SAMPLE NUMBER										RECORD KEY										UPDATE CODE										API WELL NUMBER										OPERATOR										LEASE																																							
01W										2293										C1										05										103										09/73										CC										CHEVRON										UAAA									

WELL NUMBER										FIELD/AREA										COUNTY										ST		TOWNSHIP N/S										RANGE E/W										SECTION																													
02										138Y-28										RANGELY										RIO BLANCO										CO		T										2N										R102W										S28									
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03		X										X																X		419WEBR										08-07-86																															
NCH		W										E		M		C		OK										OK		OK										MONTH										DAY										YEAR											

SAMPLED INTERVAL										SAMPLED FORMATION										FLT BLK		GEOLOGIC AGE										TEST TYPE									
04										SG17-6243												X										X									
NCH										W										E		OK										OK									

SAMPLE SOURCE										PROD METHOD										CURRENT PRODUCTION																			
05										WELL HEAD										122										710									
WELL HEAD, DST/FT, SWAB, ETC.										FLOW, PUMP, ETC.										BOPD										MCFGPD									

REMARKS (PURPOSE OF SAMPLE, ETC.)																																																																															
06																																																																															

DST RECOVERY										FT / RFT RECOVERY										SWAB RUN										SWAB RECOVERY																																																	
07																																																																															
FEET OIL										MCFGPD										FEET WATER										FEET MUD										CC OIL										CU. FT. GAS										CC WATER										CC MUD									

SAMPLE, WELL OR MUD TREATED? (FIELD ONLY)										SAMPLE TREATED (LAB ONLY)										BS&V, LAB																			
08																																							
MATERIAL										AMOUNT										MATERIAL										AMOUNT									

GRAVITY, FIELD										Rw (FIELD)										CHLORIDE (FIELD)										SAMPLED BY										GRAVITY, LAB										QUALITY CODE										DATE RECEIVED IN LAB										DATE RUN									
09										G										C										K										U																				08-08-86										01-26-87									
MONTH										DAY										YEAR										MONTH										DAY										YEAR																													

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LAB SAMPLE NUMBER										CHLORIDE										SODIUM										LITHIUM										SILICON										SAMPLE RECEIVED										ANALYSIS COMPLETED									
01W 229310										17000 4796										10400 4524																				08-08-86										01-26-87																			
										MG / L										MEQ / L										MG / L										MG / L										MONTH DAY YEAR										MONTH DAY YEAR									
11										BROMIDE										CALCIUM										RUBIDIUM										BORON										RESISTIVITY										RESISTIVITY									
11										73.1 09										790 389																														0213										77									
										MG / L										MEQ / L										MG / L										MG / L										*F										*F									
12										IODIDE										MAGNESIUM										CESIUM										ALUMINUM										TOTAL DISSOLVED SOLIDS										TDS ERROR									
12										1.9										129 106																														29381																			
										MG / L										MEQ / L										MG / L										MG / L										BY EVAPORATION										BY ADDITION									
13										SULFATE										POTASSIUM										MANGANESE										CHROMIUM										pH										SPECIFIC GRAVITY									
13										348 72										225 58																														677										25									
										MG / L										MEQ / L										MG / L										MG / L										*C										*F									
14										BICARBONATE										STRONTIUM										ZINC										LEAD										LAB NOTES																			
14										354 58										69.7 16																																																	
										MG / L										MEQ / L										MG / L										MG / L																													
15										CARBONATE										BARIUM										COPPER										LAB NOTES																													
15										ND										9.5 1																																																	
										MG / L										MEQ / L										MG / L										MG / L																													
16										HYDROXIDE										IRON																				LAB NOTES																													
16										ND																																																											
										MG / L										MEQ / L										MG / L																																							
17										UPDATE CODE										ANION SUM										CATION SUM										pH										ION ERROR										NITRATE									
17																				4935										5093										✓										0.0157										ND									
										MEQ / L										MEQ / L										ACIDIFIED SAMPLE																																							

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