



envirotech

Analytical Laboratory

CATION / ANION ANALYSIS

Howell K 4

API # 3004509510.

Client: ConocoPhillips
Sample ID: Howell K #4 BH
Laboratory Number: 59240
Chain of Custody: 12329
Sample Matrix: Aqueous
Preservative:
Condition: Intact

Project #: 96052-1706
Date Reported: 08/17/11
Date Sampled: 08/11/11
Date Received: 08/11/11
Date Analyzed: 08/11/11

Parameter	Analytical Result	Units		
pH	12.1	s.u.		
Conductivity @ 25° C	16,300	umhos/cm	RCVD DEC 1 '11	
Total Dissolved Solids @ 180C	13,100	mg/L	OIL CONS. DIV.	
Total Dissolved Solids (Calc)	15,100	mg/L		
SAR	92.5	ratio	DIST. 3	
Total Alkalinity as CaCO3	700	mg/L		
Total Hardness as CaCO3	565	mg/L		
Bicarbonate as CaCO3	< 0.01	mg/L	0.000	meq/L
Carbonate as CaCO3	300	mg/L	10.00	meq/L
Hydroxide as CaCO3	400	mg/L	23.5	meq/L
Nitrate Nitrogen	0.077	mg/L	0.001	meq/L
Nitrite Nitrogen	0.067	mg/L	0.001	meq/L
Chloride	402	mg/L	11.3	meq/L
Fluoride	3.38	mg/L	0.178	meq/L
Phosphate	2.66	mg/L	0.084	meq/L
Sulfate	8,960	mg/L	187	meq/L
Iron	< 0.01	mg/L	0.000	meq/L
Calcium	226	mg/L	11.3	meq/L
Magnesium	< 0.01	mg/L	0.001	meq/L
Potassium	33.9	mg/L	0.867	meq/L
Sodium	5,050	mg/L	220	meq/L
Cations			232	meq/L
Anions			232	meq/L
Cation/Anion Difference			0.00%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments 2011 Well Testing

Analyst

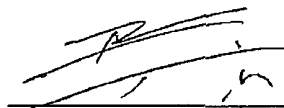
Review

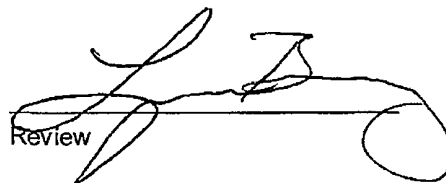
Client:	ConocoPhillips	Project #:	96052-1706
Sample ID:	Howell K #4 Int	Date Reported:	08/17/11
Laboratory Number:	59241	Date Sampled:	08/11/11
Chain of Custody:	12329	Date Received:	08/11/11
Sample Matrix:	Aqueous	Date Analyzed:	08/11/11
Preservative:			
Condition:	Intact		

Parameter	Analytical Result	Units		
pH	10.6	s.u.		
Conductivity @ 25° C	16,300	umhos/cm		
Total Dissolved Solids @ 180C	9,740	mg/L		
Total Dissolved Solids (Calc)	10,900	mg/L		
SAR	718	ratio		
Total Alkalinity as CaCO3	2,350	mg/L		
Total Hardness as CaCO3	8.36	mg/L		
Bicarbonate as CaCO3	30.0	mg/L	0.492	meq/L
Carbonate as CaCO3	2,320	mg/L	77.3	meq/L
Hydroxide as CaCO3	< 0.01	mg/L	0.001	meq/L
Nitrate Nitrogen	6.51	mg/L	0.105	meq/L
Nitrite Nitrogen	0.014	mg/L	0.000	meq/L
Chloride	4,520	mg/L	128	meq/L
Fluoride	2.48	mg/L	0.131	meq/L
Phosphate	3.60	mg/L	0.114	meq/L
Sulfate	151	mg/L	3.15	meq/L
Iron	0.017	mg/L	0.001	meq/L
Calcium	3.20	mg/L	0.160	meq/L
Magnesium	0.087	mg/L	0.007	meq/L
Potassium	46.7	mg/L	1.19	meq/L
Sodium	4,770	mg/L	207	meq/L
Cations			209	meq/L
Anions			209	meq/L
Cation/Anion Difference			0.00%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
 Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments **2011 Well Testing**


 Analyst


 Review

CHAIN OF CUSTODY RECORD

12329

Client: <i>Conoco Phillips</i>		Project Name / Location: <i>2011 Well testing</i>				ANALYSIS / PARAMETERS													
Client Address:		Sampler Name: <i>Danny Trujillo</i>				TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	TCI	TCLP with H/P	PAH	TPH (418.1)	CHLORIDE			Sample Cool	Sample Intact
Client Phone No.: <i>(505) 330-4763</i>		Client No.: <i>96052-1706</i>																	
Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative HgCl ₂ HCl													
<i>Howell K#4 BH</i>	<i>8-5-11</i>	<i>11:55 AM</i>	<i>59240</i>	Soil Sludge Solid Aqueous															
<i>Howell K#4 Int</i>	<i>8-5-11</i>	<i>11:55 AM</i>	<i>59241</i>	Soil Sludge Solid Aqueous															
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				Soil Sludge Solid Aqueous															
Relinquished by: (Signature) <i>Danny Trujillo</i>					Date <i>8-11-11</i>	Time <i>1:51 PM</i>	Received by: (Signature) <i>Rauli Vazquez</i>					Date <i>8/11/11</i>	Time <i>1:51 PM</i>						
Relinquished by: (Signature)							Received by: (Signature)												
Relinquished by: (Signature)							Received by: (Signature)												

Chris R. Pierson@conoco

Resampled 8/11/11



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