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Lab Reference  
87064E

21:11 23-Oct-

# FINAL REPORT

020471

Identification: VANGORDA BASELINE

Type of Sample: FW

Submitted by: CORNETT, DAN  
DINA, WHITEHORSE  
WATER RESOURCES  
DINA  
FED. GOVT

Logged in: 01-Sep-87 (14 samples)

Completed: 22-Oct-87 (952 results)

Charged to: 99-100  
D. I. N. A. - WHITEHORSE

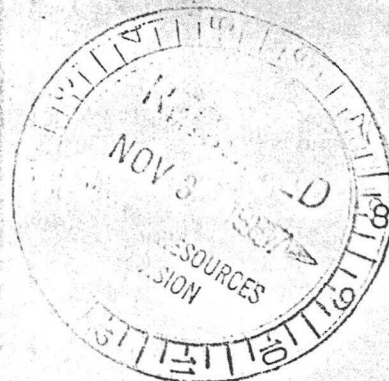
Analyzed for: GENERAL CHEM., NUTRIENTS, METALS  
RESIDUES

Notes:

Checked by: *[Signature]*

*Aug 26-27 /87 INSPECTION*

*# 7293 - 7306*



RESULTS FOR VANGORDA BASELINE SAMPLES

Parameter Analyzed	Units	V5	V7	V8	RED SPRING	DDH3
		7293 1870646-001	7294 1870646-002	7295 1870646-003	7296 1870646-004	7297 1870646-005
ALKALINITY	mg/l	164	91.3	119	113	167
CHLORIDE	mg/l	1.8	.5	1.1	.5	.6
COLOUR/TRUE	Rel.U.	30	10	20	20	5
CONDUCTIVITY	umho/cm	405	225	300	290	365
FLUORIDE	mg/l	<.05	<.05	<.05	<.05	<.05
METALS/EXT. (WATER-ICP SCAN)	AL mg/l	.22	<.05	.1	<.05	<.05
	AS mg/l	<.05	<.05	<.05	<.05	<.05
	B mg/l	<.001	<.001	<.001	<.001	<.001
	BA mg/l	.074	.054	.061	.102	.04
	BE mg/l	<.001	<.001	<.001	<.001	<.001
	CA mg/l	48.8	28.5	36.8	50.1	50.2
	CD mg/l	<.002	<.002	<.002	<.002	<.002
	CO mg/l	.01	<.005	<.005	.033	<.005
	CR mg/l	<.005	<.005	<.005	.006	<.005
	CU mg/l	<.005	<.005	<.005	.009	<.005
	FE mg/l	.385	.062	.137	1.73	.57
	MG mg/l	19.8	9.2	14	4.3	13
	MN mg/l	.024	.003	.009	.003	.014
	MO mg/l	<.005	<.005	<.005	<.005	<.005
	NA mg/l	2.5	1.8	2.2	1.5	5.4
	NI mg/l	<.02	<.02	<.02	<.02	<.02
	P mg/l	<.05	.06	<.05	.06	.07
	PB mg/l	<.02	<.02	<.02	.12	<.02
	SB mg/l	<.05	<.05	<.05	<.05	<.05
	SE mg/l	<.05	<.05	<.05	<.05	<.05
	SI mg/l	4.9	4.1	3.5	4.5	6.4
	SN mg/l	<.01	<.01	<.01	<.01	<.01
	SR mg/l	.212	.124	.165	.184	.329
	TI mg/l	.003	<.002	<.002	<.002	<.002
	V mg/l	<.005	<.005	<.005	.011	<.005
	ZN mg/l	.01	.012	.008	.538	.004
METALS/EXT: HARDNESS/CA+MG	HC mg/l	203	109	149	143	179
METALS/EXT: HARDNESS/TOTAL	HT mg/l	206	110	150	147	180
METALS/TOTAL (WATER-ICP)	AL mg/l	.48	.06	.19	<.05	<.05
	AS mg/l	<.05	<.05	<.05	<.05	<.05
	B mg/l	<.001	<.001	<.001	<.001	<.001
	BA mg/l	.085	.057	.068	.105	.042
	BE mg/l	<.001	<.001	<.001	<.001	<.001
	CA mg/l	53.5	30.5	39.9	52.9	52.3
	CD mg/l	<.002	<.002	<.002	<.002	<.002
	CO mg/l	.013	<.005	<.005	.034	.011
	CR mg/l	<.005	<.005	<.005	<.005	<.005
	CU mg/l	<.005	<.005	<.005	<.005	<.005
	FE mg/l	.581	.086	.195	1.85	.598
	MG mg/l	21.8	9.8	15.3	4.5	13.5
	MN mg/l	.026	.004	.009	.002	.015
	MO mg/l	<.005	<.005	<.005	.008	<.005
	NA mg/l	2.7	2	2.4	1.7	5.7
	NI mg/l	<.02	<.02	<.02	<.02	<.02
	P mg/l	<.05	<.05	<.05	<.05	<.05
	PB mg/l	<.02	<.02	<.02	.12	<.02
	SB mg/l	<.05	<.05	<.05	<.05	<.05

RESULTS FOR VANGORDA BASELINE SAMPLES

		V5	V7	V8	REO SPRING	DDH-3
Parameter Analyzed		7293	7294	7295	7296	7297
Units		1870646-001	1870646-002	1870646-003	1870646-004	1870646-00
METALS/TOTAL (WATER-ICP)	SE   mg/l	<.05	<.05	<.05	<.05	<.05
	SI   mg/l	5.1	4.1	4.3	4.5	6.3
	SN   mg/l	.04	.03	<.01	<.01	.03
	SR   mg/l	.229	.131	.175	.193	.336
	TI   mg/l	.012	.003	.003	<.002	<.002
	V   mg/l	<.005	<.005	<.005	<.005	<.005
	ZN   mg/l	.012	.015	.012	.568	.009
NITROGEN/AMMONIA	mg/l	<.005	<.005	<.005	<.005	.026
NITROGEN/NITRITE	mg/l	<.005	<.005	<.005	<.005	<.005
NITROGEN/NITRITE+NITRATE	mg/l	.009	<.005	<.005	<.005	<.005
PH	Rel.U.	8.1	8.0	8.2	6.9	7.8
PHOSPHORUS/TOTAL	mg/l	.009	.003	.003	<.002	.002
RESIDUE/FILTERABLE	mg/l	268	142	196	175	223
RESIDUE/NON-FILTERABLE	mg/l	12	<5	<5	7	<5
SULPHATE	mg/l	50	22	30	29	23
TURBIDITY	FTU	0.8	0.2	0.4	5.3	4.8

RESULTS FOR VANGORDA BASELINE SAMPLES

Parameter Analyzed	Units	V4	V3	V2	V6	V13	
		7298 1870646-006	7299 1870646-007	7300 1870646-008	7301 1870646-009	7302 1870646-010	
ALKALINITY	mg/l	239	30.3	97.4	40.1	50.2	
CHLORIDE	mg/l	.9	<.5	.6	<.5	.6	
COLOUR/TRUE	Rel.U.	20	5	10	20	30	
CONDUCTIVITY	umho/cm	495	83	245	93	128	
FLUORIDE	mg/l	<0.05	<0.05	<0.05	<0.05	<0.05	
METALS/EXT. (WATER-ICP SCAN)							
AL	mg/l	.1	<.05	<.05	<.05	.25	
AS	mg/l	<.05	<.05	<.05	<.05	<.05	
B	mg/l	<.001	<.001	<.001	<.001	<.001	
BA	mg/l	.081	.04	.105	.029	.065	
BE	mg/l	<.001	<.001	<.001	<.001	<.001	
CA	mg/l	67.2	10.9	34.4	13.4	16.8	
CD	mg/l	<.002	<.002	<.002	<.002	.002	
CO	mg/l	<.005	<.005	<.005	<.005	<.005	
CR	mg/l	<.005	<.005	<.005	<.005	.006	
CU	mg/l	<.005	<.005	<.005	<.005	.006	
FE	mg/l	.37	.032	.014	.03	.383	
MG	mg/l	25.2	2.1	8	2.2	4.1	
MN	mg/l	.041	.001	<.001	.003	.019	
MO	mg/l	.007	<.005	<.005	.007	.01	
NA	mg/l	2.5	1.5	3	1.3	2.1	
NI	mg/l	<.02	<.02	<.02	<.02	<.02	
P	mg/l	.07	<.05	<.05	<.05	<.05	
PB	mg/l	.03	<.02	<.02	<.02	.04	
SB	mg/l	<.05	<.05	<.05	<.05	<.05	
SE	mg/l	<.05	<.05	<.05	<.05	<.05	
SI	mg/l	4.6	3.8	4.1	4.6	4.7	
SN	mg/l	<.01	<.01	<.01	<.01	<.01	
SR	mg/l	.283	.055	.153	.066	.073	
TI	mg/l	.003	<.002	<.002	.002	.012	
V	mg/l	<.005	<.005	<.005	<.005	.008	
ZN	mg/l	.007	.02	.005	.002	.017	
METALS/EXT: HARDNESS/CA+MG	HC	mg/l	272	35.7	119	42.6	58.6
METALS/EXT: HARDNESS/TOTAL	HT	mg/l	273	35.9	119	42.9	60.8
METALS/TOTAL (WATER-ICP)							
AL	mg/l	.2	.05	<.05	.08	.49	
AS	mg/l	<.05	<.05	<.05	<.05	<.05	
B	mg/l	<.001	<.001	<.001	<.001	<.001	
BA	mg/l	.078	.039	.103	.028	.065	
BE	mg/l	<.001	<.001	<.001	<.001	<.001	
CA	mg/l	68.5	10.8	34.4	13.5	17.1	
CD	mg/l	<.002	<.002	<.002	<.002	.005	
CO	mg/l	.01	<.005	<.005	<.005	.012	
CR	mg/l	<.005	<.005	<.005	<.005	.007	
CU	mg/l	<.005	<.005	<.005	<.005	.008	
FE	mg/l	.398	.041	.019	.032	.493	
MG	mg/l	25.4	2.1	8.1	2.3	4.2	
MN	mg/l	.044	<.001	<.001	.002	.02	
MO	mg/l	<.005	<.005	<.005	<.005	.009	
NA	mg/l	2.6	1.5	2.9	1.4	2.2	
NI	mg/l	<.02	.02	<.02	<.02	<.02	
P	mg/l	.07	<.05	<.05	<.05	<.05	
PB	mg/l	<.02	<.02	<.02	<.02	.05	
SB	mg/l	<.05	<.05	<.05	<.05	<.05	

RESULTS FOR VANGORDA BASELINE SAMPLES

Parameter Analyzed	Units	V4	V3	V2	V6	V13
		7298	7299	7300	7301	7302
		1870646-006	1870646-007	1870646-008	1870646-009	1870646-011
METALS/TOTAL (WATER-ICP)						
SE	mg/l	<.05	<.05	<.05	<.05	<.05
SI	mg/l	4.4	3.7	4.5	4.4	5
SN	mg/l	<.01	.01	.01	<.01	.02
SR	mg/l	.289	.055	.16	.067	.074
TI	mg/l	.003	<.002	.017	<.002	.012
V	mg/l	<.005	<.005	.006	<.005	.015
ZN	mg/l	.006	.025	.008	<.002	.018
NITROGEN/AMMONIA	mg/l	<.005	<.005	<.005	<.005	<.005
NITROGEN/NITRITE	mg/l	<.005	<.005	<.005	<.005	<.005
NITROGEN/NITRITE+NITRATE	mg/l	<.005	<.005	<.005	<.005	<.005
PH	Rel.U.	8.2	7.6	7.9	7.5	7.7
PHOSPHORUS/TOTAL	mg/l	.005	.003	<.002	.003	.009
RESIDUE/FILTERABLE	mg/l	315	59	152	69	97
RESIDUE/NON-FILTERABLE	mg/l	9	7	<5	<5	12
SULPHATE	mg/l	34	9	21	5	9
TURBIDITY	FTU	0.8	0.1	0.1	0.1	2.8

RESULTS FOR VANGORDA BASELINE SAMPLES

Parameter Analyzed	Units	V1	GRUM ADIT	DOAL LK	V14	
		7303	7304	7305	7306	
		1870646-011	1870646-012	1870646-013	1870646-014	
ALKALINITY	mg/l	17.9	259	42.0	15.9	
CHLORIDE	mg/l	<.5	.9	.5	<.5	
COLOUR/TRUE	Rel.U.	10	5	20	5	
CONDUCTIVITY	umho/cm	53	650	93	42.5	
FLUORIDE	mg/l	<0.05	<0.05	<0.05	<0.05	
METALS/EXT. (WATER-ICP SCAN)						
AL	mg/l	<.05	<.05	.06	<.05	
AS	mg/l	.06	.08	<.05	<.05	
B	mg/l	<.001	<.001	<.001	<.001	
BA	mg/l	.027	.051	.04	.023	
BE	mg/l	<.001	<.001	<.001	<.001	
CA	mg/l	6.6	72.3	13.9	5.4	
CD	mg/l	.002	<.002	.002	<.002	
CO	mg/l	<.005	.051	<.005	<.005	
CR	mg/l	<.005	<.005	<.005	<.005	
CU	mg/l	.006	<.005	<.005	<.005	
FE	mg/l	.017	3.54	.058	.075	
MG	mg/l	1	39.8	2	.8	
MN	mg/l	.002	.186	.012	.003	
MO	mg/l	<.005	.015	<.005	<.005	
NA	mg/l	1.3	11.3	1.7	1.2	
NI	mg/l	<.02	.03	<.02	<.02	
P	mg/l	<.05	<.05	<.05	<.05	
PB	mg/l	.03	<.02	<.02	<.02	
SB	mg/l	<.05	<.05	<.05	<.05	
SE	mg/l	<.05	<.05	<.05	<.05	
SI	mg/l	3.7	4.7	1.4	2.3	
SN	mg/l	<.01	<.01	<.01	<.01	
SR	mg/l	.036	.656	.071	.031	
TI	mg/l	<.002	<.002	<.002	<.002	
V	mg/l	.006	<.005	<.005	<.005	
ZN	mg/l	.008	2.11	<.002	<.002	
METALS/EXT: HARDNESS/CA+MG	HC	mg/l	20.8	344	43.2	16.8
METALS/EXT: HARDNESS/TOTAL	HT	mg/l	21.2	355	43.7	17.3
METALS/TOTAL (WATER-ICP)						
AL	mg/l	.08	.06	.12	.12	
AS	mg/l	<.05	<.05	<.05	<.05	
B	mg/l	<.001	<.001	<.001	<.001	
BA	mg/l	.026	.051	.038	.023	
BE	mg/l	<.001	<.001	<.001	<.001	
CA	mg/l	6.8	73.9	14	5.4	
CD	mg/l	<.002	<.002	<.002	<.002	
CO	mg/l	<.005	.073	<.005	<.005	
CR	mg/l	<.005	<.005	<.005	<.005	
CU	mg/l	<.005	<.005	<.005	<.005	
FE	mg/l	.029	3.61	.063	.081	
MG	mg/l	1.1	41.1	2.1	1	
MN	mg/l	<.001	.186	.012	.003	
MO	mg/l	<.005	.016	<.005	<.005	
NA	mg/l	1.3	11.7	1.8	1.2	
NI	mg/l	<.02	.03	<.02	<.02	
P	mg/l	<.05	.1	.05	.08	
PB	mg/l	<.02	.04	<.02	<.02	
SB	mg/l	<.05	<.05	<.05	<.05	

RESULTS FOR VANGORDA BASELINE SAMPLES

Parameter Analyzed	Units	V1	GRUM ADIT	DAL LK	V14
		7303	7304	7305	7306
		1870646-011	1870646-012	1870646-013	1870646-014
METALS/TOTAL (WATER-ICP)					
SE	mg/l	<.05	<.05	<.05	<.05
SI	mg/l	3.6	4.6	1.4	2.9
SN	mg/l	<.01	<.01	<.01	<.01
SR	mg/l	.036	.658	.071	.032
TI	mg/l	<.002	<.002	<.002	<.002
V	mg/l	<.005	.008	.006	<.005
ZN	mg/l	.01	2.28	.004	<.002
NITROGEN/AMMONIA	mg/l	<.005	.102	<.005	<.005
NITROGEN/NITRITE	mg/l	<.005	<.005	<.005	<.005
NITROGEN/NITRITE+NITRATE	mg/l	<.005	<.005	<.005	<.005
PH	Rel. U.	7.1	7.7	7.4	7.1
PHOSPHORUS/TOTAL	mg/l	.003	.004	.006	.004
RESIDUE/FILTERABLE	mg/l	35	431	63	34
RESIDUE/NON-FILTERABLE	mg/l	<5	9	10	<5
SULPHATE	mg/l	5	90	3	4
TURBIDITY	FTU	0.1	28	0.5	0.2