

BRIAN SANDOVAL
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STATE OF NEVADA

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**DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC AND BEHAVIORAL HEALTH
Bureau of Preparedness, Assurance, Inspections and Statistics**

Radiation Control Program
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February 27, 2018

MEMORANDUM

To: Beatty File

From: John Follette, Radiation Control Specialist *JF*

Subject: Beatty Inspection Summary February 7, 2018

An inspection of the Beatty Low-Level Waste landfill (closed) was conducted on February 7, 2018 by Ross Armstrong, Brandie Peretz, and John Follette. The radiological survey was performed by driving the BNC Model RD-120 GN (SN 120009) backpack around the site boundary access road and in a grid pattern across the cap to detect radiological anomalies. None were detected. Dose rate readings on the cap remain about twice background*, as read on the access road.

Status of Previous Inspection Items:

The markers for the trenches are not in place on the cap. They are still stacked off to the side of the cap, inside of the fenced area.

Radiological Postings Adequate: All of the postings along the fence are adequate. However, we may want to add additional radiological postings to the new gate.

Site Observations:

Radiological Postings Adequate: All of the postings along the fence are adequate. However, we may want to add additional radiological postings to the new gate.

Site Boundary Fence Undamaged and Gate(s) Locked: There are some areas along the north fence where the metal fence posts are bent and the fence is losing integrity. See enclosed pictures.

Site Boundary, Access Road, and Buffer Areas Maintained: Yes

Rain Since Last Inspection:

November - 0.0", December - 0.0", January - 0.17", and February - 0.0" as of February 6, 2018.

Erosion, Fissures, Water Pooling, or Subsidence Concerns:

One erosion area was identified along the East fence. It is about 30 inches across and 10 inches deep. See attached pictures.

Radiation Survey Results:

Instrument: BNC Model RD-120 GN (SN 120009) Calibration date: Daily by self-calibration

Background Location: Between US 95 and the site, at the south-east side of the site entrance gate.

Background measurement: 19-22 urem/hr

Value used for twice background: 44 urem/hr

Site Boundary Highest Measurement: Within twice background*

Cap Highest Measurement: Within twice background*

*If sustained radiation measurements are above twice background, record the measurement and identify the location. Otherwise, indicate all measurements were within twice background.

For any reading above 0.5 mrem/hr contact a supervisor or the State of Nevada Radiation Control Program Manager. (Site Stabilization and Closure Plan Closure Plan for Low-Level Radioactive Waste Management Facility US Ecology, Inc. Beatty, Nevada, submittal date December 1988.)

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Station Summary

Beatty 11SSE US Ecology Nevada

Monthly Summary for

November, 2017

Day of Month	Day of Year	Total Solar Rad. ly.	Ave Wind . mph	V. Dir. Deg	Max . mph	Air Temperature Deg. Fahrenheit			Humidity Percent			Dew Point Deg. Fahrenheit	Wet Bulb	Total Precip . inches
						Mean	Max	Min	Mea n	Ma x	Mi n			
1	305	365	4.6	205	14.0	62	76	45	36	52	24	34	47	0.00
2	306	360	7.4	164	23.6	59	71	46	47	68	32	38	48	0.00
3	307	265	8.1	138	17.0	56	64	47	48	67	34	36	45	0.00
4	308	348	6.3	109	17.1	58	73	41	42	69	23	34	46	0.00
5	309	352	10.5	127	22.2	59	71	52	45	65	27	37	47	0.00
6	310	302	6.0	267	14.7	53	67	40	41	68	24	29	42	0.00
7	311	359	4.3	275	12.2	54	72	40	28	48	13	20	39	0.00
8	312	348	9.6	161	23.7	56	70	37	27	36	17	22	41	0.00
9	313	338	8.8	161	22.5	61	73	46	34	55	18	31	46	0.00
10	314	331	6.2	285	17.8	54	69	42	43	60	27	32	43	0.00
11	315	342	3.8	235	14.1	56	72	43	34	56	18	27	42	0.00
12	316	176	5.5	281	15.7	54	67	44	32	41	20	23	40	0.00
13	317	295	6.3	268	16.7	53	67	40	29	47	14	19	38	0.00
14	318	302	4.8	259	11.9	56	73	42	24	33	14	18	39	0.00
15	319	286	6.3	261	16.1	54	68	41	30	42	20	23	40	0.00
16	320	220	8.1	221	28.4	62	76	44	32	41	24	32	46	0.00
17	321	281	15.9	260	45.3	61	74	45	30	47	10	29	45	0.00
18	322	330	4.5	270	20.8	46	63	34	20	35	9	5	32	0.00
19	323	320	4.1	281	10.6	47	65	28	15	28	7	0	31	0.00
20	324	252	3.6	259	10.2	53	68	42	11	16	6	-1	35	0.00
21	325	252	5.8	300	17.8	60	80	44	19	36	11	16	41	0.00
22	326	303	3.9	263	11.7	65	84	49	31	45	18	32	47	0.00
23	327	265	3.7	290	12.5	63	82	49	32	49	18	32	47	0.00
24	328	197	4.0	261	12.0	61	77	48	32	47	20	30	45	0.00
25	329	297	5.3	248	14.1	62	77	48	24	38	13	24	44	0.00
26	330	297	6.8	214	23.0	64	79	47	26	44	13	27	46	0.00

<u>27</u>	331	239	20.6	6	62.3	60	69	50	29	59	19	27	44	0.00
<u>28</u>	332	295	7.2	272	28.8	51	65	41	31	51	16	20	38	0.00
<u>29</u>	333	290	4.6	272	15.4	52	70	37	25	40	12	15	37	0.00
<u>30</u>	334	292	4.7	280	12.4	51	68	38	26	41	15	16	37	0.00

MONTHLY STATISTICS

	Total Solar Rad. ly.	Wind		Air Temperature			Humidity			Dew Point Deg. Fahrenheit	Wet Bulb Deg. Fahrenheit	Total Precip inches	
		Ave mph	V. Dir. Deg	Max mph	Mean	Max	Min	Mea n	Ma x				Mi n
Total	8897											0.00	
Ave.	297	6.7	237	19.5	56.7	71.6	43.1	31	47	18	24	42	
Max.	365	20.6		62.3	65	84	52	48	69	34	38	48	0.00
Min.	176	3.6		10.2	46	63	28	11	16	6	-1	31	0.00

Data are subject to further review and editing. Please refer any questions to the Western Regional Climate Center.

° 1 ly = 1 cal/cm² = 4.1855 J/cm² = 3.6855 BTU/ft² = .01163 KW-hr/m²



Station Summary

Beatty 11SSE US Ecology Nevada

Monthly Summary for

December, 2017

Day of Month	Day of Year	Total Solar Rad. ly.	Wind		Air Temperature			Humidity			Dew Point	Wet Bulb	Total Precip. inches	
			Ave . mph	V. Dir. Deg	Max . mph	Mean	Max	Min	Mea n	Ma x				Mi n
				Deg. Fahrenheit			Percent			Deg. Fahrenheit				
<u>1</u>	335	273	5.0	264	11.4	51	67	38	26	37	15	16	36	0.00
<u>2</u>	336	276	5.8	285	13.9	51	66	36	29	41	18	19	37	0.00
<u>3</u>	337	293	14.3	325	47.5	52	72	41	24	44	8	13	37	0.00
<u>4</u>	338	237	19.7	324	38.3	42	50	35	25	35	13	7	30	0.00
<u>5</u>	339	295	24.8	323	45.2	44	56	35	21	32	11	5	31	0.00
<u>6</u>	340	286	20.0	329	37.3	51	63	41	18	24	12	9	35	0.00
<u>7</u>	341	290	11.7	2	32.3	53	64	39	14	24	7	3	35	0.00
<u>8</u>	342	290	9.6	9	28.9	56	69	44	14	21	8	6	37	0.00
<u>9</u>	343	290	4.2	291	14.6	53	70	41	13	22	6	3	35	0.00
<u>10</u>	344	285	4.2	317	14.0	52	73	38	10	18	4	-5	34	0.00
<u>11</u>	345	289	3.7	306	16.4	51	73	34	8	14	2	-11	33	0.00
<u>12</u>	346	265	3.4	83	17.8	55	74	37	7	10	3	-9	35	0.00
<u>13</u>	347	286	10.0	87	35.7	58	73	43	8	17	4	-5	37	0.00
<u>14</u>	348	278	16.1	314	39.5	56	68	41	15	27	6	8	38	0.00
<u>15</u>	349	274	4.5	248	11.0	49	63	34	21	33	12	9	34	0.00
<u>16</u>	350	105	20.7	326	47.7	48	55	41	27	37	19	15	35	0.00
<u>17</u>	351	274	24.1	322	44.2	43	51	36	24	32	15	8	31	0.00
<u>18</u>	352	259	5.0	158	26.2	46	60	34	24	34	15	11	33	0.00
<u>19</u>	353	277	4.6	256	14.3	46	58	32	27	46	18	13	33	0.00
<u>20</u>	354	253	17.7	322	71.4	44	63	32	28	36	16	12	32	0.00
<u>21</u>	355	274	27.5	332	53.7	40	47	32	28	44	15	8	29	0.00
<u>22</u>	356	251	5.0	199	29.9	39	52	28	19	30	10	-0	27	0.00
<u>23</u>	357	218	3.2	263	9.2	41	55	29	14	20	8	-5	28	0.00
<u>24</u>	358	141	3.3	294	9.1	46	59	36	12	16	8	-3	31	0.00
<u>25</u>	359	182	4.8	268	12.2	48	64	37	16	26	12	4	33	0.00
<u>26</u>	360	249	4.9	295	19.1	52	73	39	27	39	11	18	38	0.00

27	361	277	4.6	278	13.2	49	66	35	22	36	12	11	34	0.00
28	362	279	4.4	284	9.9	50	69	36	16	28	8	5	34	0.00
29	363	280	4.0	281	11.1	51	69	39	14	21	8	2	34	0.00
30	364	253	3.6	282	9.6	51	69	38	14	20	7	2	34	0.00
31	365	245	4.1	283	11.8	50	68	39	15	21	8	3	33	0.00

MONTHLY STATISTICS

	Total Solar Rad. ly.	Wind			Air Temperature			Humidity			Dew	Wet	Total
		Ave .	V. Dir.	Max .	Mean	Max	Min	Mea n	Ma x	Mi n	Point	Bulb	Precip .
		mph	Deg	mph	Deg. Fahrenheit			Percent			Deg. Fahrenheit		inches
Total	8025												0.00
Ave.	259	9.6	312	25.7	49.0	63.8	36.8	19	29	10	6	34	
Max.	295	27.5		71.4	58	74	44	29	46	19	19	38	0.00
Min.	105	3.2		9.1	39	47	28	7	10	2	-11	27	0.00

Data are subject to further review and editing. Please refer any questions to the Western Regional Climate Center.

$^{\circ} 1 \text{ ly} = 1 \text{ cal/cm}^2 = 4.1855 \text{ J/cm}^2 = 3.6855 \text{ BTU/ft}^2 = .01163 \text{ KW-hr/m}^2$



Station Summary

Beatty 11SSE US Ecology Nevada

Monthly Summary for

January, 2018

Day of Month	Day of Year	Total Solar Rad. ly.	Wind		Air Temperature			Humidity			Dew Point	Wet Bulb	Total Precip. inches	
			Ave . mph	V. Dir. Deg	Max . mph	Mean	Max	Min	Mea n	Ma x				Mi n
						Deg. Fahrenheit			Percent			Deg. Fahrenheit		
<u>1</u>	1	253	3.7	321	10.6	51	70	36	15	25	8	4	34	0.00
<u>2</u>	2	171	3.4	281	10.8	54	68	43	21	35	15	14	38	0.00
<u>3</u>	3	261	4.4	259	12.1	52	68	36	24	43	11	13	36	0.00
<u>4</u>	4	250	5.7	277	17.5	51	65	38	18	26	10	8	35	0.00
<u>5</u>	5	279	4.7	283	14.4	54	68	40	33	49	16	25	41	0.00
<u>6</u>	6	217	6.8	309	28.2	56	68	45	44	57	31	34	45	0.00
<u>7</u>	7	282	5.6	184	24.1	52	65	42	40	65	20	27	40	0.00
<u>8</u>	8	68	6.8	207	19.5	48	51	45	66	96	35	36	42	0.17
<u>9</u>	9				21.0		51	47		96	77			
<u>10</u>	10				10.2		54	39		96	65			
<u>11</u>	11	276	3.9	157	11.8	48	62	37	68	87	38	37	42	0.00
<u>12</u>	12	290	7.9	315	22.4	52	68	37	52	87	14	30	41	0.00
<u>13</u>	13	291	5.9	9	20.9	55	67	43	34	52	18	25	41	0.00
<u>14</u>	14				9.8		71	41		60	20			
<u>15</u>	15	253	4.1	253	11.3	54	67	40	47	70	26	33	43	0.00
<u>16</u>	16	214	4.4	286	12.5	53	69	42	50	71	25	34	43	0.00
<u>17</u>	17	257	3.9	283	10.4	53	71	40	47	74	22	32	42	0.00
<u>18</u>	18	246	7.3	128	21.2	54	65	41	45	70	29	32	43	0.00
<u>19</u>	19	138	12.4	143	41.5	55	64	43	42	59	30	31	43	0.00
<u>20</u>	20	282	21.2	325	45.6	44	50	38	36	67	19	17	34	0.00
<u>21</u>	21	322	12.2	316	27.5	41	51	31	31	47	18	12	31	0.00
<u>22</u>	22	317	4.1	262	11.7	42	58	30	33	49	15	14	31	0.00
<u>23</u>	23	322	3.5	296	9.7	46	63	32	36	57	20	19	35	0.00
<u>24</u>	24	318	9.3	170	24.4	47	60	31	32	58	15	17	35	0.00
<u>25</u>	25	306	12.0	333	27.5	50	61	37	23	36	13	13	36	0.00
<u>26</u>	26	342	6.3	305	21.0	44	58	31	22	35	11	7	31	0.00

<u>27</u>	27	325	7.8	314	29.3	48	64	29	26	41	12	13	34	0.00
<u>28</u>	28	336	8.6	330	32.3	57	71	46	28	41	16	23	41	0.00
<u>29</u>	29	317	3.7	297	10.9	57	75	41	26	46	11	20	41	0.00
<u>30</u>	30	346	3.9	275	13.5	57	75	43	24	37	11	19	40	0.00
<u>31</u>	31	338	5.3	260	15.0	57	77	41	24	41	12	19	40	0.00

MONTHLY STATISTICS

	Total Solar Rad. ly.	Wind		Air Temperature			Humidity			Dew Point Deg. Fahrenheit	Wet Bulb Deg. Fahrenheit	Total Precip inches	
		Ave .mph	V. Dir. Deg	Max .mph	Mean	Max	Min	Mea n	Ma x				Mi n
Total	7616											0.17	
Ave.	272	6.7	296	19.3	51.1	64.3	38.8	35	57	22	22	39	
Max.	346	21.2		45.6	57	77	47	68	96	77	37	45	0.17
Min.	68	3.4		9.7	41	50	29	15	25	8	4	31	0.00

Data are subject to further review and editing. Please refer any questions to the Western Regional Climate Center.

$^{\circ} 1 \text{ ly} = 1 \text{ cal/cm}^2 = 4.1855 \text{ J/cm}^2 = 3.6855 \text{ BTU/ft}^2 = .01163 \text{ KW-hr/m}^2$

JAN 2018



Station Summary

Beatty 11SSE US Ecology Nevada

Monthly Summary for

February, 2018

Day of Month	Day of Year	Total Solar Rad. ly.	Ave Wind mph	V. Dir. Deg	Max Wind mph	Air Temperature Mean Deg. Fahrenheit	Max Deg. Fahrenheit	Min Deg. Fahrenheit	Humidity Mean Percent	Max Percent	Min Percent	Dew Point Deg. Fahrenheit	Wet Bulb Deg. Fahrenheit	Total Precip. inches
<u>1</u>	32	279	4.4	113	21.4	59	74	47	18	27	11	15	40	0.00
<u>2</u>	33	348	6.8	290	23.4	62	77	49	23	33	16	23	44	0.00
<u>3</u>	34	344	18.8	323	36.5	65	74	53	23	36	14	25	46	0.00
<u>4</u>	35	336	12.1	316	30.6	63	74	53	23	36	13	23	44	0.00
<u>5</u>	36	365	9.0	301	27.1	61	78	47	23	39	12	22	43	0.00
<u>6</u>	37				31.4		68	54		27	10			

MONTHLY STATISTICS

	Total Solar Rad. ly.	Ave Wind mph	V. Dir. Deg	Max Wind mph	Air Temperature Mean Deg. Fahrenheit	Max Deg. Fahrenheit	Min Deg. Fahrenheit	Humidity Mean Percent	Max Percent	Min Percent	Dew Point Deg. Fahrenheit	Wet Bulb Deg. Fahrenheit	Total Precip. inches
Total	1673												0.00
Ave.	335	10.2	314	28.4	61.9	74.2	50.5	22	33	12	22	43	
Max.	365	18.8		36.5	65	78	54	23	39	16	25	46	0.00
Min.	279	4.4		21.4	59	68	47	18	27	10	15	40	0.00

Data are subject to further review and editing. Please refer any questions to the Western Regional Climate Center.

$1 \text{ ly} = 1 \text{ cal/cm}^2 = 4.1855 \text{ J/cm}^2 = 3.6855 \text{ BTU/ft}^2 = .01163 \text{ KW-hr/m}^2$



East 1

East 1





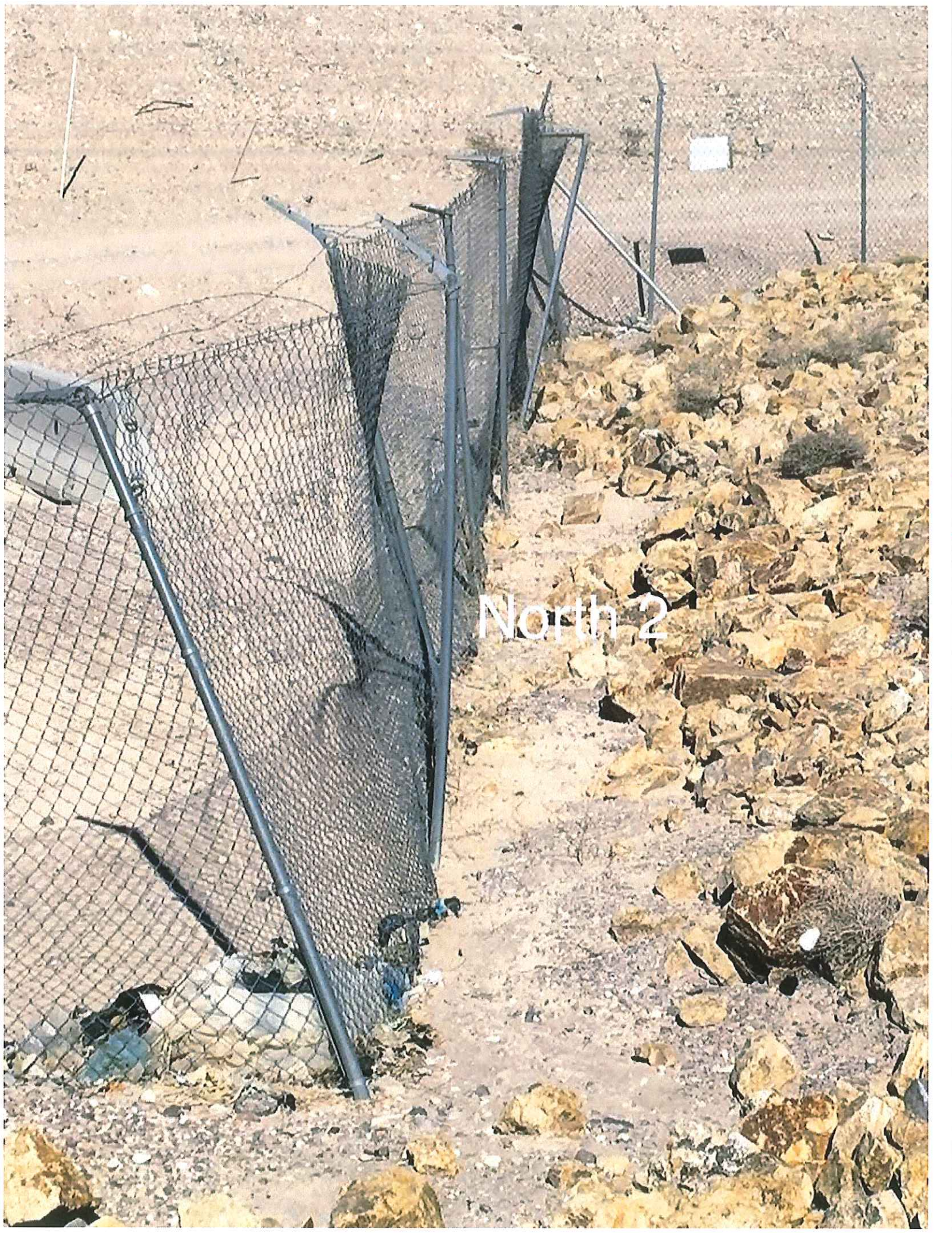
East 1



East 1

North 1





North 2



North 3