Department of Energy

Ohio Field Office
Fernald Area Office
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23 AUG 2000

Mr. James A. Saric, Remedial Project Manager
U.S. Environmental Protection Agency
Region V-SRF-5J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

DOE-0947-00

Mr. Tom Schneider, Project Manager
Ohio Environmental Protection Agency
401 East 5th Street
Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

TRANSMITTAL OF THE MAY, JUNE, AND JULY 2000 MONTHLY REPORTS FOR IMPACTED MATERIAL PLACEMENT AT THE ON-SITE DISPOSAL FACILITY

Enclosed for your information is the May, June, and July 2000 Monthly Reports for Impacted Material Placement at the On-Site Disposal Facility (OSDF). The following information is included:

- May, June, and July 2000 Monthly Weather Summary
- Air Monitoring Sampling Data - May, June, and July 2000 readings from the OSDF, Southern Waste Units (SWU), and Haul Road
- Placement Graphs -
  - May, June, and July Category 1 soil placement versus projected placement in In-place Cubic Yards (ICY)
  - May, June, and July debris placement versus projected placement (ICY)
  - May, June, and July total placement versus projected placement (ICY)
  - May, June, and July total placement versus projected placement in Bank Cubic Yards (BCY)
- Current Surface Plan Views – Cell 1, Cell 2, and Cell 3 plan views showing the current lift of impacted material as of July 28, 2000
- OSDF Cross Sections – Selected cross sections looking north and west showing placement progress

Recycled and Recyclable

Summary

Approximately 79,000 ICY of impacted material have been placed during May, June, and July 2000. Approximately 116,000 ICY of impacted material have been placed since the start of the construction season (March 8, 2000). These quantities are based on surveyed quantities. The enclosed graphs reflect estimated in-place quantities based on shrinkage factors for compaction and bulking factors. The estimated quantities closely match the surveyed quantities. As shown in the graphs, total placement was proceeding on schedule along with the projected values until a large amount of rain days in late June and early July slowed progress slightly.

There are approximately 18,000 ICY in airspace left to reach the bottom of contouring layer for the Cell 1 cap. This includes approximately 15,700 ICY of select impacted material and approximately 2,300 ICY of Category 1 impacted material. There have been approximately 11,300 ICY of select impacted material placed in Cell 1 through July 28, 2000. Cell 1 has reached approximately 95 percent of its impacted material storage capacity. Cell 2 has reached approximately 50 percent of its impacted material storage capacity. Cell 3 has reached approximately 15 percent of its impacted material storage capacity.

Other activities within the cells included a demonstration to the Ohio Environmental Protection Agency (OEPA) for placement of Category 3 material in accordance with proposed Addendum 5 to the Impacted Materials Placement Plan (IMPP). On May 16, 2000, transite panel bundles were placed in a prepared grid. Addendum 5 proposes three panel bundles to be placed adjacent to one another. This allows more material to be placed in a single grid than that described in the IMPP. A second activity was removing silt from the Cell 2 and Cell 3 catchment areas. The removal of silt in the Cell 3 catchment area has not been entirely completed at the date of this report.

The current surface plans for Cells 1, 2, and 3 show the category of impacted material placed at each grid. The latest lift is noted on the grid along with the quantity of that lift and the date it was placed. Grids with the same lift number will not necessarily contain the same category of material.

Impacted material was placed in accordance with the IMPP in Cells 1, 2, and 3. Category 5 material was placed in trenches in Cells 1 and 2. Category 2 asbestos-containing material and Category 3 impacted material were placed in Cell 3.

If you have any questions or require additional information, please contact Jay Jalovec at (513) 648-3122.

Sincerely,

Johnny Reising

Johnny W. Reising
Fernald Remedial Action
Project Manager

FEMP:Jalovec

Enclosure

cc w/enclosure:
G. Jablonowski, USEPA-V, SRF-5J
T. Schneider, OEPA-Dayton (three copies of enclosure)
F. Bell, ATSDR
M. Schupe, HSI GeoTrans
R. Vandegrift, ODH
F. Hodge, Tetra Tech
AR Coordinator, Fluor Fernald, Inc./78

cc w/o enclosure:
N. Hallein, EM-31/CLOV
J. Jalovec, OH/FEMP
R. J. Janke, OH/FEMP
J. Reising, OH/FEMP
A. Tanner, OH/FEMP
D. Carr, Fluor Fernald, Inc./2
M. Cherry, Fluor Fernald, Inc./52-2
J. Chiou, Fluor Fernald, Inc./52-0
T. Hagen, Fluor Fernald, Inc./65-2
J. Harmon, Fluor Fernald, Inc./90
S. Hinnefeld, Fluor Fernald, Inc./31
M. Jewett, Fluor Fernald, Inc./52-2
U. Kumthekar, Fluor Fernald, Inc./64
A. Snider, Fluor Fernald, Inc./64
C. Van Arsdale, Fluor Fernald, Inc./64
T. Walsh, Fluor Fernald, Inc./65-2
ECDC, Fluor Fernald, Inc./52-7

MAY 2000 MONTHLY SUMMARY

Date	Hi	Lo	Rain	Max Wind	Peak Gust	omments
May 1, 2000 (Mo)	73	44	0.06	12.6	23.5	Mostly cloudy. Occasional rain shower.
May 2, 2000 (Tu)	70	45	0.01	9.6	19.6	Sunny.
May 3, 2000 (We)	79	47	0.18	9.9	22.0	Some am fog. Variable cloudiness. Late evening thundershowers.
May 4, 2000 (Th)	77	61	0.12	11.1	19.8	Some am fog. Variable cloudiness. Late evening thundershowers.
May 5, 2000 (Fr)	81	59	0.00	9.6	18.9	Variable cloudiness. Widely scattered pm thundershowers in area.
May 6, 2000 (Sa)	84	54	0.00	13.6	26.6	Partly cloudy.
May 7, 2000 (Su)	83	60	0.01	15.5	30.4	Variable cloudiness. Scattered pm showers and thundershowers.
May 8, 2000 (Mo)	83	69	0.00	17.6	31.9	Partly cloudy.
May 9, 2000 (Tu)	83	63	0.07	14.6	29.3	Mostly cloudy. Late evening thundershowers.
May 10, 2000 (We)	69	52	0.10	13.1	28.7	Early am thundershowers. Clearing by mid-morning to partly cloudy skies
May 11, 2000 (Th)	81	50	0.00	13.6	26.7	Partly cloudy.
May 12, 2000 (Fr)	82	75	0.00	14.6	28.8	Mostly cloudy.
May 13, 2000 (Sa)	70	53	0.92	13.7	26.3	Partly cloudy. Early am showers/thunderstorms.
May 14, 2000 (Su)	62	42	0.00	9.8	19.8	Partly cloudy.
May 15, 2000 (Mo)	69	39	0.00	10.6	20.6	Mostly sunny.
May 16, 2000 (Tu)	71	40	0.11	12.2	24.7	Mostly cloudy. Evening showers and thundershowers.
May 17, 2000 (We)	75	51	0.21	15.2	27.0	Mostly cloudy. Occasional showers, thundershowers.
May 18, 2000 (Th)	78	66	0.04	15.7	30.3	Mostly cloudy. Afternoon showers, thundershowers.
May 19, 2000 (Fr)	77	59	0.00	16.8	35.3	Variable cloudiness.
May 20, 2000 (Sa)	59	52	0.06	5.4	11.0	Cloudy and cool with light rain and drizzle.
May 21, 2000 (Su)	67	53	0.01	5.8	11.3	Early am showers. Otherwise, mostly cloudy.
May 22, 2000 (Mo)	73	49	0.31	11.7	20.3	Mostly cloudy. Late afetrnoon/early evening showers and thundershowe
May 23, 2000 (Tu)	76	59	0.36	12.8	26.4	Cloudy with early am showers and thundershowers.
May 24, 2000 (We)	86	60	0.00	12.3	27.8	Mostly sunny.
May 25, 2000 (Th)	74	56	0.00	9.6	20.8	Variable cloudiness.
May 26, 2000 (Fr)	74	46	0.00	7.6	21.0	Mostly cloudy.
May 27, 2000 (Sa)	77	58	1.18	6.8	14.1	Cloudy. Early morning thunderstorms.
May 28, 2000 (Su)	69	58	0.08	12.0	25.1	Cloudy. Occasional light rain and rain showers.
May 29, 2000 (Mo)	67	54	0.00	10.1	18.9	Cloudy.
May 30, 2000 (Tu)	71	49	0.00	9.6	17.1	Partly cloudy.
May 31, 2000 (We)	85	57	0.00	11.6	20.6	Dense am fog. Variable cloudiness.
	Max	Min	Total	Max Wind	Peak Wind	
	86	39	3.83	17.6	35.3	

JUNE 2000 MONTHLY SUMMARY

Date	Hi	Lo	Rain	Max Wind	Peak Gust	omments
June 1, 2000 (Th)	87	63	0.00	9.0	18.6	Mostly sunny.
June 2, 2000 (Fr)	87	61	0.16	13.3	25.1	Partly cloudy. Afternoon showers andf thundershowers.
June 3, 2000 (Sa)	71	54	0.00	8.6	17.0	Mostly cloudy.
June 4, 2000 (Su)	75	50	0.01	8.7	14.8	Mostly sunny. Late evening showers.
June 5, 2000 (Mo)	72	54	0.16	14.6	27.1	Mostly cloudy. Occasional rain showers.
June 6, 2000 (Tu)	69	51	0.00	16.7	33.3	Mostly sunny.
June 7, 2000 (We)	76	44	0.00	7.6	13.9	Mostly sunny.
June 8, 2000 (Th)	82	55	0.01	12.8	22.7	Early am shower. Otherwise, mostly sunny.
June 9, 2000 (Fr)	86	56	0.00	10.2	18.0	Mostly sunny.
June 10, 2000 (Sa)	88	61	0.00	11.4	21.2	Parlty cloudy.
June 11, 2000 (Su)	89	71	0.00	10.3	21.1	Partly cloudy.
June 12, 2000 (Mo)	89	69	0.24	8.4	14.5	Variable cloudiness. Early am showers.
June 13, 2000 (Tu)	87	69	0.08	10.7	21.1	Mostly cloudy. Mid-morning showers.
June 14, 2000 (We)	86	72	0.38	14.8	31.4	Mostly cloudy. Occasional thundershowers.
June 15, 2000 (Th)	79	70	0.00	12.8	22.4	Mostly cloudy am. Sunny pm.
June 16, 2000 (Fr)	83	65	1.08	14.4	29.2	Mostly cloudy. Afternoon/evening showers and thundershowers.
June 17, 2000 (Sa)	76	65	0.21	6.7	11.1	Cloudy. Light rain through mid-am.
June 18, 2000 (Su)	71	63	0.61	9.4	18.6	Cloudy. Morning thundershowers.
June 19, 2000 (Mo)	78	59	0.00	7.3	14.4	Partly cloudy.
June 20, 2000 (Tu)	83	55	0.00	10.9	19.0	Cloudy.
June 21, 2000 (We)	79	66	0.59	11.7	23.3	Early am thundershowers. Otherwise, partly cloudy.
June 22, 2000 (Th)	84	62	0.00	11.7	24.7	Sunny.
June 23, 2000 (Fr)	86	60	0.00	7.5	14.9	Mostly sunny.
June 24, 2000 (Sa)	84	68	0.20	15.4	38.1	Variable cloudiness. Occasional thundershowers.
June 25, 2000 (Su)	82	67	0.27	14.6	31.2	Early am thunderstorm. Cloudy am, partly cloudy pm.
June 26, 2000 (Mo)	83	62	0.00	7.7	15.0	Mostly cloudy.
June 27, 2000 (Tu)	74	64	0.07	9.1	22.5	Early am rain showers.
June 28, 2000 (We)	75	60	0.00	5.7	13.4	Cloudy am, partly cloudy pm.
June 29, 2000 (Th)	76	51	0.00	8.6	17.5	Mostly sunny.
June 30, 2000 (Fr)	75	58	0.00	4.7	11.8	Mostly sunny.
	Max	Min	Total	Max Wind	Peak Wind	
	89	44	4.07	16.7	38.1	

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JULY 2000 MONTHLY SUMMARY

Date	Hi	Lo	Rain	Max Wind	Peak Gust	omments
July 1, 2000 (Sa)	81	56	0.00	6.1	12.7	Mostly sunny.
July 2, 2000 (Su)	85	62	0.00	12.7	20.2	Mostly sunny.
July 3, 2000 (Mo)	86	72	0.26	9.5	24.3	Mostly cloudy. Occasional thundershowers.
July 4, 2000 (Tu)	87	71	Trace	12.1	15.9	Partly cloudy. Evening thundershowers in area.
July 5, 2000 (We)	81	71	0.41	7.7	13.8	Cloudy. Occasional rain showers.
July 6, 2000 (Th)	83	70	0.00	8.1	13.9	Mostly cloudy.
July 7, 2000 (Fr)	79	64	0.00	11.6	20.0	Partly cloudy.
July 8, 2000 (Sa)	82	58	0.00	5.6	10.5	Mostly sunny.
July 9, 2000 (Su)	87	61	0.00	10.9	21.2	Partly cloudy.
July 10, 2000 (Mo)	86	73	Trace	9.2	19.6	Cloudy.
July 11, 2000 (Tu)	77	73	0.09	9.6	16.0	Overcast with early morning rain showers.
July 12, 2000 (We)	83	67	0.00	7.2	15.4	Variable cloudiness.
July 13, 2000 (Th)	84	67	0.00	8.8	14.9	Mostly sunny.
July 14, 2000 (Fr)	84	65	0.00	14.2	25.4	Mostly cloudy.
July 15, 2000 (Sa)	80	62	0.00	11.3	21.7	Partly cloudy.
July 16, 2000 (Su)	80	61	0.00	9.4	16.7	Mostly cloudy.
July 17, 2000 (Mo)	83	62	0.00	8.5	15.3	Partly cloudy.
July 18, 2000 (Tu)	84	69	0.00	7.6	13.0	Variable cloudiness.
July 19, 2000 (We)	75	63	0.32	12.9	24.1	Cloudy. Early am showers and thundershowers.
July 20, 2000 (Th)	77	62	0.00	7.5	18.4	Cloudy am. Partly cloudy pm.
July 21, 2000 (Fr)	78	61	0.00	9.2	21.9	Partly cloudy.
July 22, 2000 (Sa)	76	54	0.00	6.9	12.7	Mostly sunny.
July 23, 2000 (Su)	79	58	0.00	7.6	14.8	Partly cloudy.
July 24, 2000 (Mo)	78	59	0.00	9.4	19.1	Mostly sunny.
July 25, 2000 (Tu)	80	58	0.00	7.3	16.0	Variable cloudiness.
July 26, 2000 (We)	84	63	0.00	6.0	12.1	Variable cloudiness.
July 27, 2000 (Th)	83	65	0.00	8.3	15.1	Mostly cloudy.
July 28, 2000 (Fr)	84	66	0.00	12.5	21.0	Mostly sunny.
July 29, 2000 (Sa)	74	69	0.10	10.5	18.8	Cloudy. Afternoon showers and thundershowers.
July 30, 2000 (Su)	78	70	0.63	11.1	20.8	Mostly cloudy. Early am showers, late evening thundershowers.
July 31, 2000 (Mo)	82	69	0.97	9.9	21.7	Variable cloudiness. Occasional showers and thunderstorms.
	Max	Min	Total	Max Wind	Peak Wind	
	87	54	2.78	14.2	25.4	

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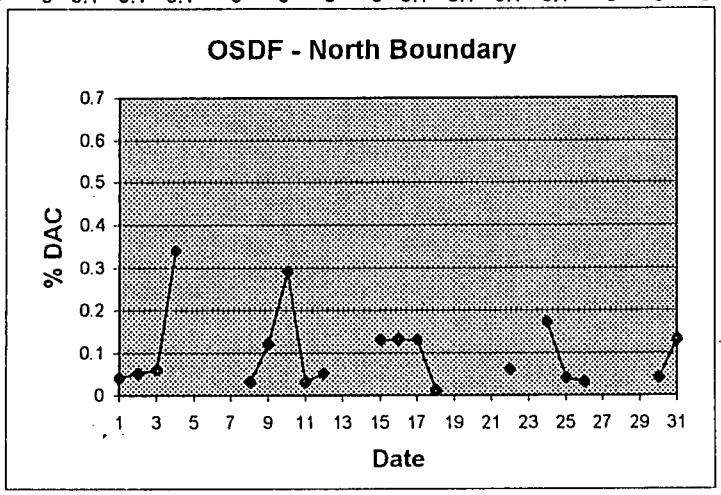
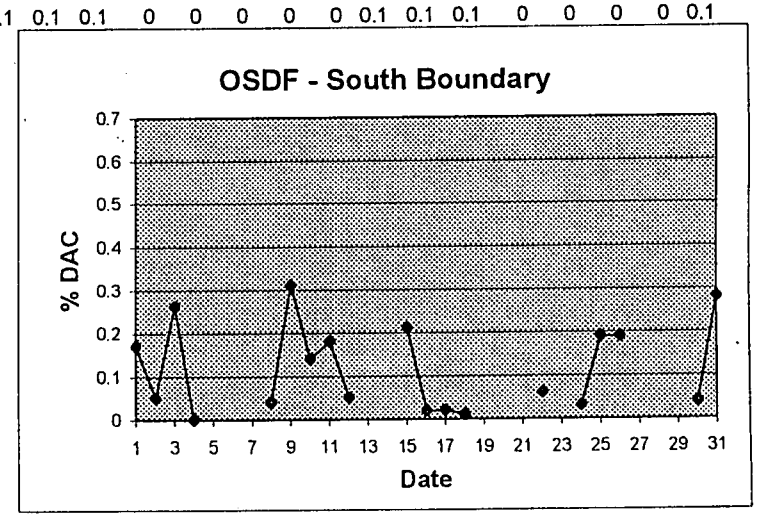
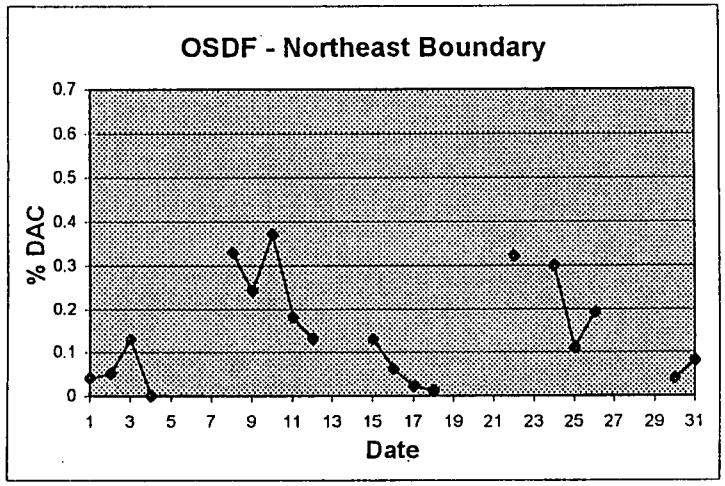
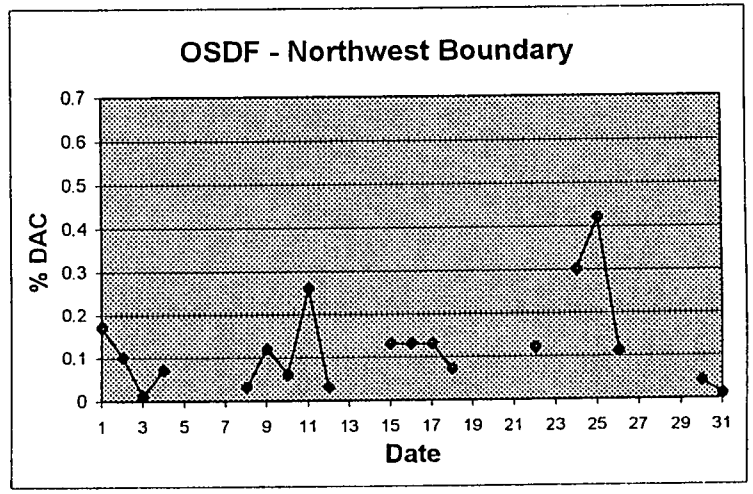
OSDF BOUNDARY AIR SAMPLES - MAY 2000

Day	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
N. BNDY	0	0.1	0.1	0.3				0	0.1	0.3	0	0.1			0.1	0.1	0.1	0				0.1		0.2	0	0				0	0.1
S. BNDY	0.2	0.1	0.3	0				0	0.3	0.1	0.2	0.1			0.2	0	0	0				0.1		0	0.2	0.2				0	0.3
NE. BND	0	0.1	0.1	0				0.3	0.2	0.4	0.2	0.1			0.1	0.1	0	0				0.3		0.3	0.1	0.2				0	0.1
NW. BN	0.2	0.1	0	0.1				0	0.1	0.1	0.3	0			0.1	0.1	0.1	0.1				0.1		0.3	0.4	0.1				0	0
SE. BND	0.2	0	0.3	0.1				0	0	0.1	0	0.1			0.1	0.2	0.6	0.3				0.2		0	0.3	0.1				0.5	0
SW. BN	0.2	0.1	0	0.1				0	0.1	0.2	0.2	0.1			0.1	0.1	0	0.2				0.2		0.2	0.1	0				0	0
N. O/N	0	0.1	0	0.1				0	0.3	0	0	0.1			0	0	0.2	0				0		0	0.1	0.1				0	0
S. O/N	0	0	0	0.2				0	0.1	0	0	0.1			0	0	0	0				0		0	0	0				0	0.1
NE. O/N	0	0.1	0.1	0				0.1	0	0	0	0			0	0.1	0	0				0		0	0.1	0.2				0	0.1
NW. O/N	0	0	0	0				0	0.1	0.1	0	0			0	0	0	0.1				0		0.1	0.1	0				0	0.1
SE. O/N	0	0.1	0.1	0.2				0	0.2	0.1	0.2	0.2			0	0	0.1	0.1				0		0	0	0.1				0	0.3
SW. O/N	0	0.1	0	0.2				0	0.1	0.1	0	0			0.1	0.1	0.1	0.1				0		0.1	0	0.2				0	0.1
days su	0.9	0.3	0.7	0.6	0	0	0	0.5	0.9	1.2	0.9	0.4	0	0	0.9	0.7	0.9	0.6	0	0	0	0.9	0	1	1.1	0.7	0	0	0	0.7	0.5
days avg	0.2	0.1	0.1	0.1	0	0	0	0.1	0.2	0.2	0.1	0.1	0	0	0.1	0.1	0.2	0.1	0	0	0	0.2	0	0.2	0.2	0.1	0	0	0	0.1	0.1
nights su	0.1	0.4	0.3	0.6	0	0	0	0.1	0.7	0.4	0.3	0.4	0	0	0.1	0.4	0.5	0.3	0	0	0	0.1	0	0.3	0.4	0.7	0	0	0	0	0.6
nights av	0	0.1	0.1	0.1	0	0	0	0	0.1	0.1	0.1	0.1	0	0	0	0.1	0.1	0.1	0	0	0	0	0	0.1	0.1	0.1	0	0	0	0	0.1



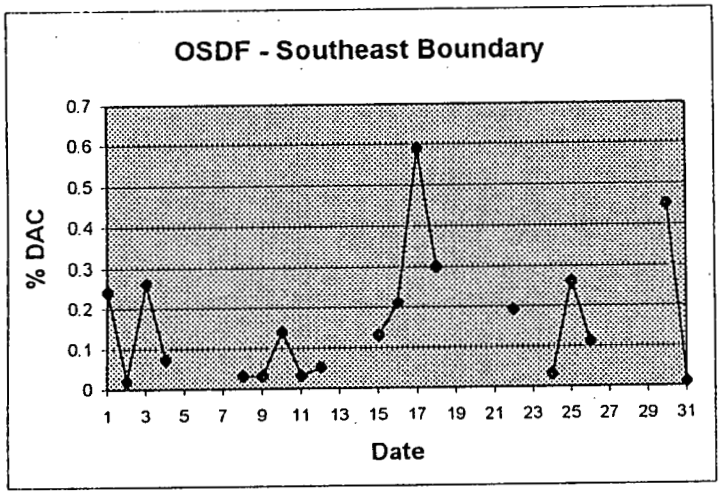


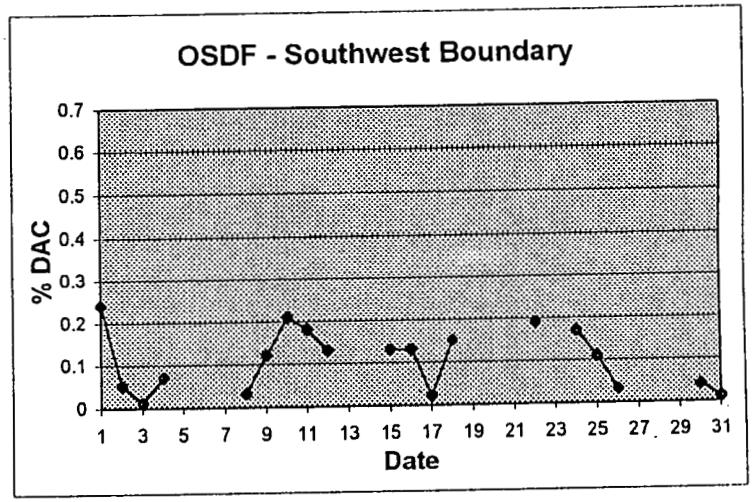


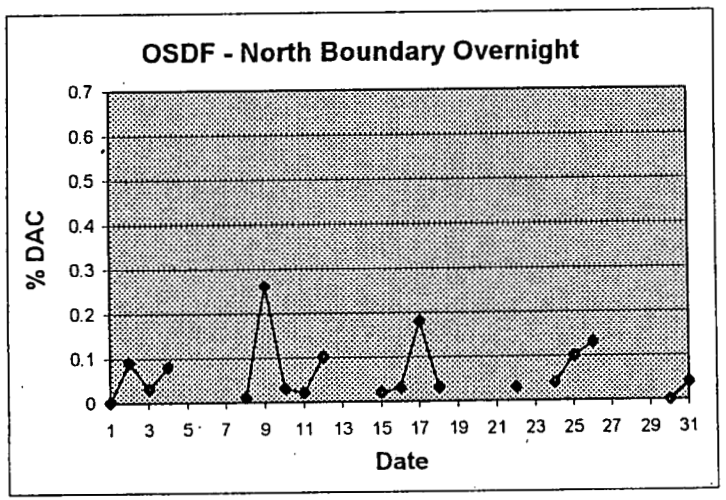


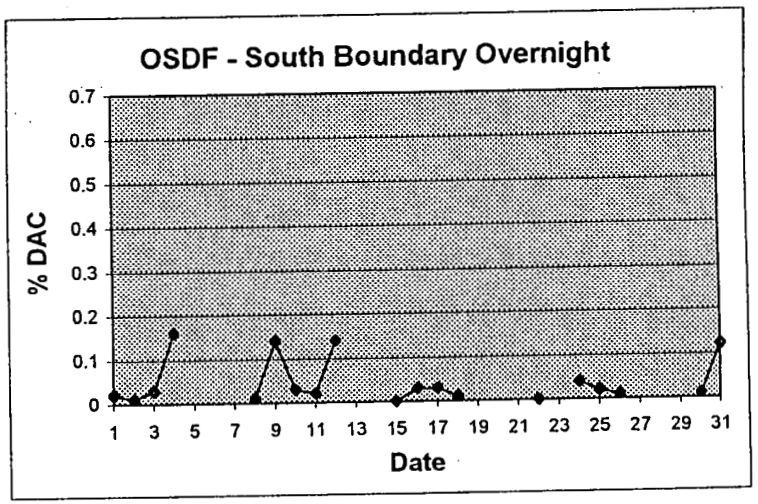
Action level for radiological (occupational) air monitoring is 2% DAC. Isotope of concern is U-238; associated DAC is 2E-11 uCi/ml.

OSDF BOUNDARY AIR SAMPLES - MAY 2000









Action level for radiological (occupational) air monitoring is 2% DAC. Isotope of concern is U-238; associated DAC is 2E-11 uCi/ml.

On Site Disposal Facility - May

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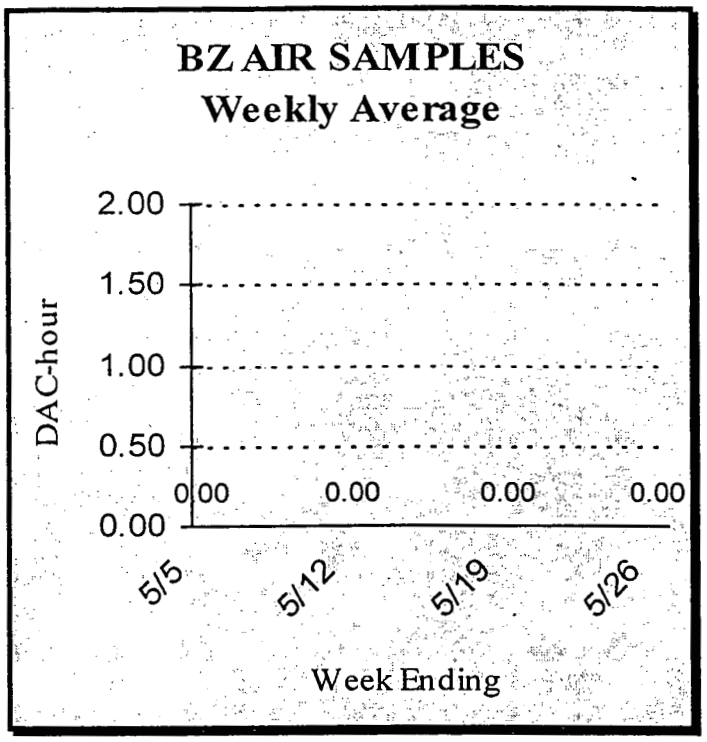
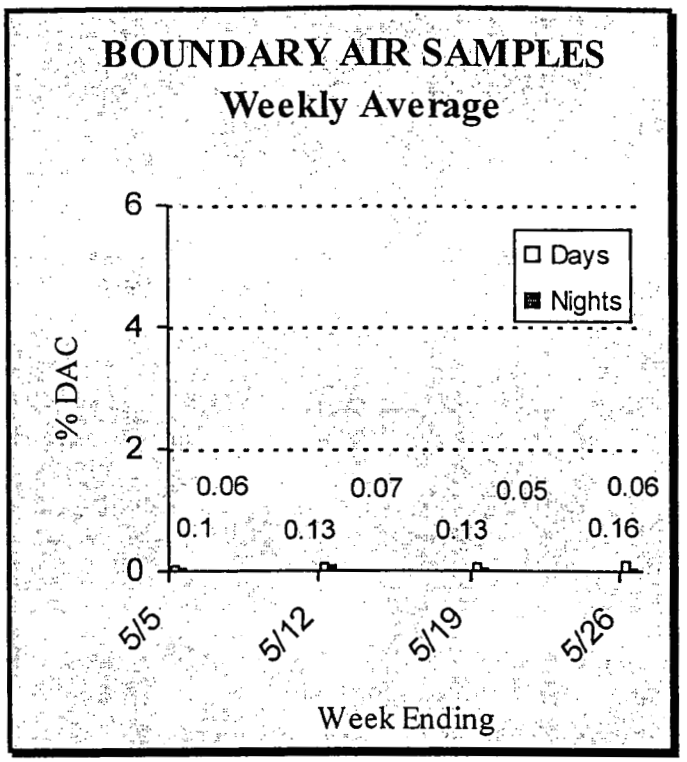




Project Activities and Events

- Performance of OSDF impacted material placement
- Permanent power to all air samplers; all air samplers run 24 hours/day

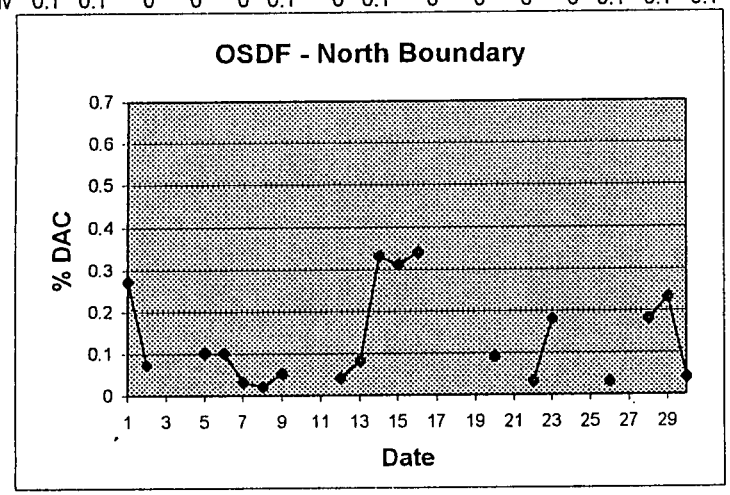
Engineering and Administrative Controls

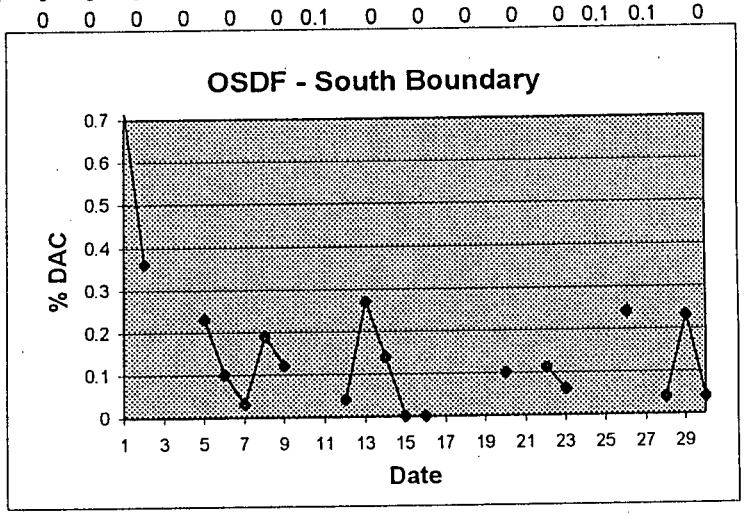
- Water used for dust control in work areas
- Workers remain safe working distance from operating equipment and upwind of potential dust generating activities

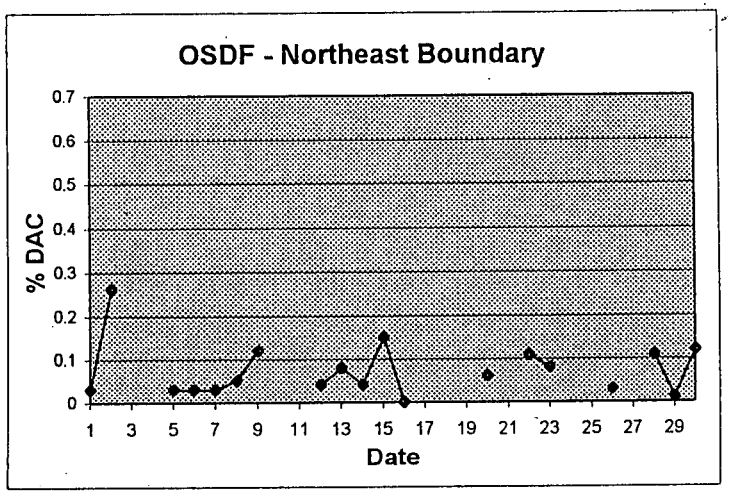
Note: BZA limit - 12 DAC-hrs/week; Boundary limit - 2% DAC averaged over a week

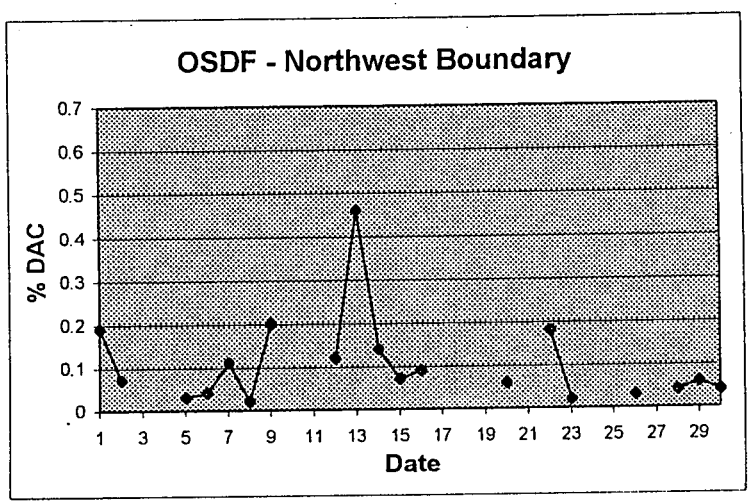
OSDF BOUNDARY AIR SAMPLES - JUNE 2000

Day	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
N. BNDY	0.3	0.1			###	0.1	0	0	0.1			0	0.1	0.3	0.3	0.3				0.1		0	0.2			0		0.2	0.2	0
S. BNDY	0.7	0.4			###	0.1	0	0.2	0.1			0	0.3	0.1	0	0				0.1		0.1	0.1			0.2		0	0.2	0
NE. BND	0	0.3			###	0	0	0.1	0.1			0	0.1	0	0.2	0				0.1		0.1	0.1			0		0.1	0	0.1
NW. BN	0.2	0.1			###	0	0.1	0	0.2			0.1	0.5	0.1	0.1	0.1				0.1		0.2	0			0		0	0.1	0
SE. BND	0.1	0.1			###	0.1	0.1	0.2	0			0	0.1	0	0.1	0.1				0		0	0.2			0		0.1	0	0
SW. BN	0	0.2			###	0.1	0.1	0.3	0.1			0	0.2	0.1	0.1	0.3				0.2		0.1	0.1			0		0.3	0.1	0.1
N. O/N	0.1	0.1			###	0.1	0.1	0.1	0.1			0	0.2	0	0	0				0		0	0.1			0		0.1	0.1	0.1
S. O/N	0.2	0.2			###	0.2	0	0.1	0.1			0	0	0.2	0	0				0		0				0		0.1	0.1	0.1
NE. O/N	0.1	0.2			###	0.1	0	0	0.1			0	0.1	0.1	0.1	0.1				0		0	0.1			0		0	0.1	0
NW. O/N	0.1	0			###	0	0	0	0			0	0.1	0.1	0.1	0				0		0	0.1			0		0	0	0
SE. O/N	0.1	0			###	0	0.1	0.1	0			0	0	0	0.2	0.1				0		0	0.1			0		0	0.1	0.1
SW. O/N	0	0.1			###	0	0	0.1	0			0	0.1	0	0.1	0				0		0	0			0		0.1	0	0.1
days su	1.4	1	0	0	0.7	0.5	0.5	0.7	0.6	0	0	0.3	1.1	0.8	0.7	0.9	0	0	0	0.6	0	0.6	0.6	0	0	0.4	0	0.7	0.6	0.4	0
days avg	0.2	0.2	0	0	0.1	0.1	0.1	0.1	0.1	0	0	0.1	0.2	0.1	0.1	0.1	0	0	0	0.1	0	0.1	0.1	0	0	0.1	0	0.1	0.1	0.1	0
nights su	0.6	0.6	0	0	0.1	0.4	0.2	0.4	0.3	0	0	0.1	0.4	0.3	0.5	0.4	0	0	0	0	0	0.2	0.5	0	0	0.1	0	0.3	0.4	0.4	0
nights av	0.1	0.1	0	0	0	0.1	0	0.1	0	0	0	0	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0.1	0	0	0	0	0	0.1	0.1	0







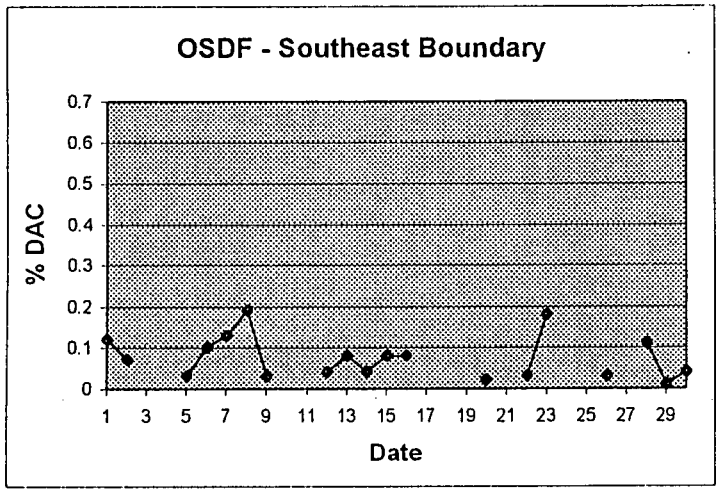


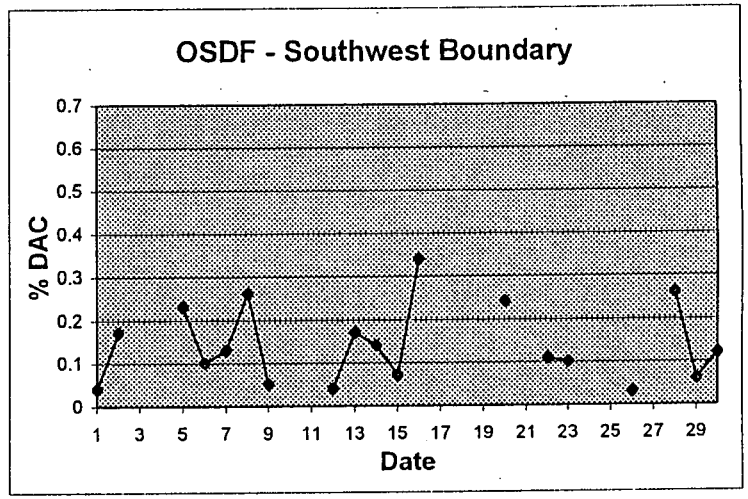
Action level for radiological (occupational) air monitoring is 2% DAC. Isotope of concern is U-238; associated DAC is 2E-11 uCi/ml.

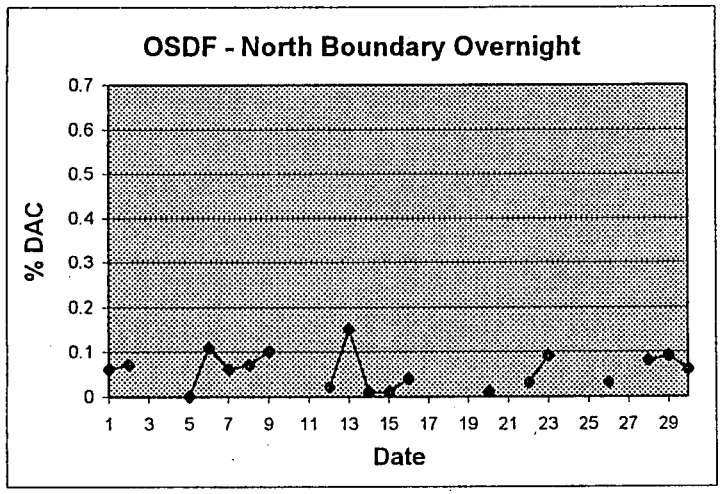
000010

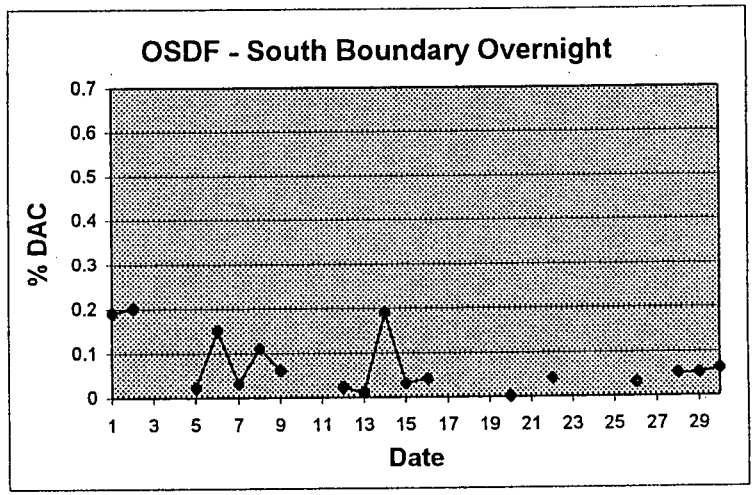
3192

OSDF BOUNDARY AIR SAMPLES - JUNE 2000



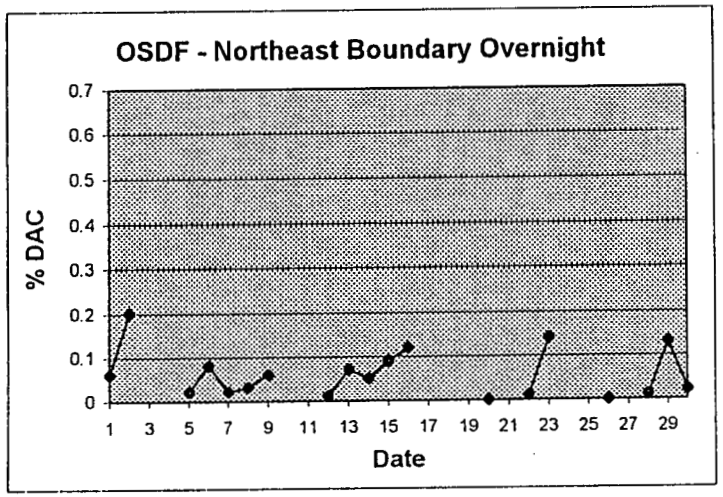


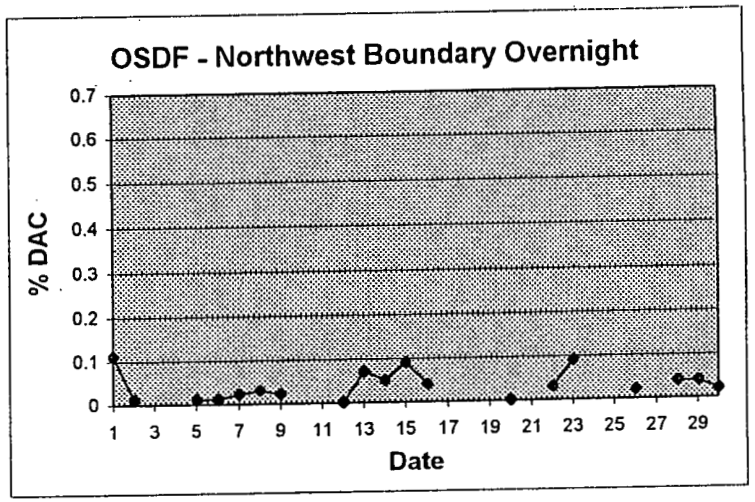


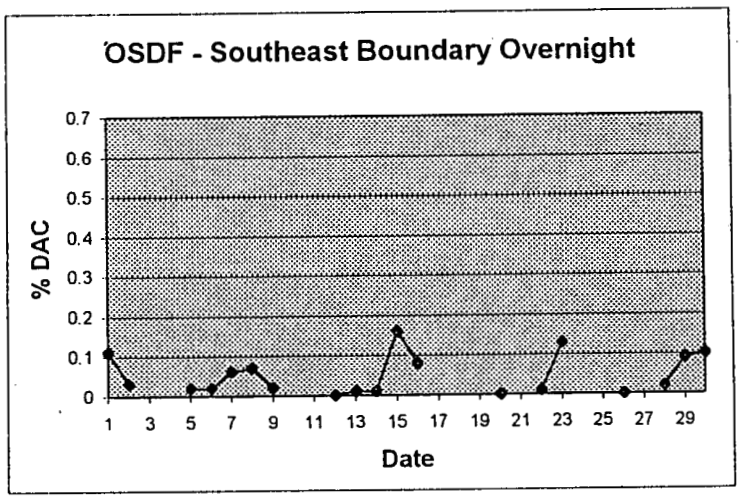


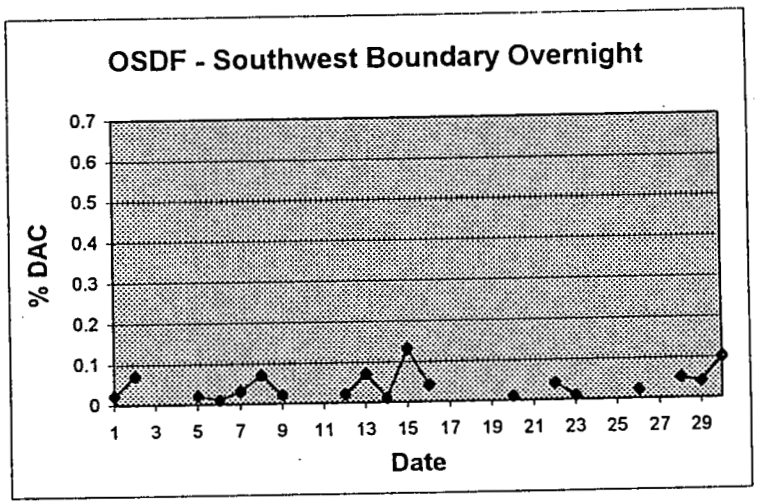
Action level for radiological (occupational) air monitoring is 2% DAC. Isotope of concern is U-238; associated DAC is 2E-11 uCi/ml.

OSDF BOUNDARY AIR SAMPLES - JUNE 2000





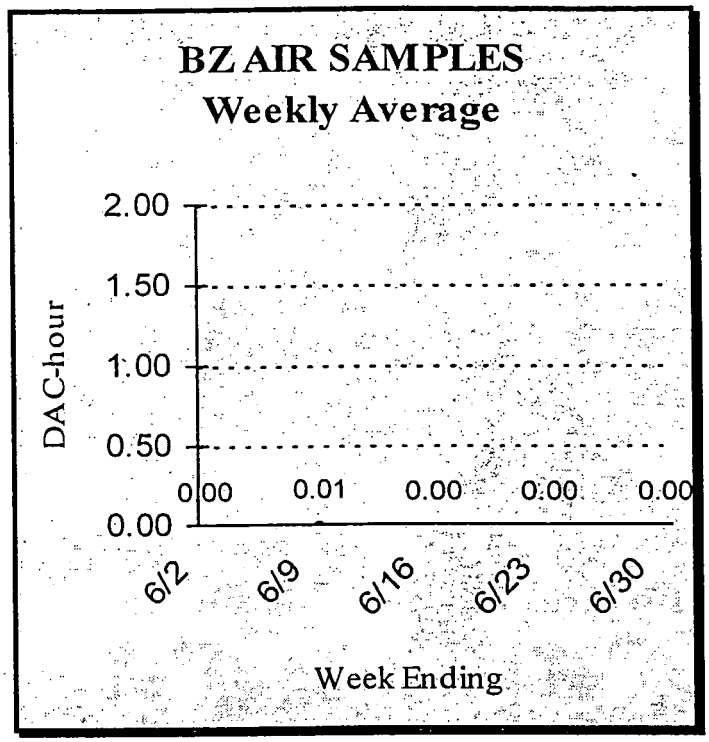


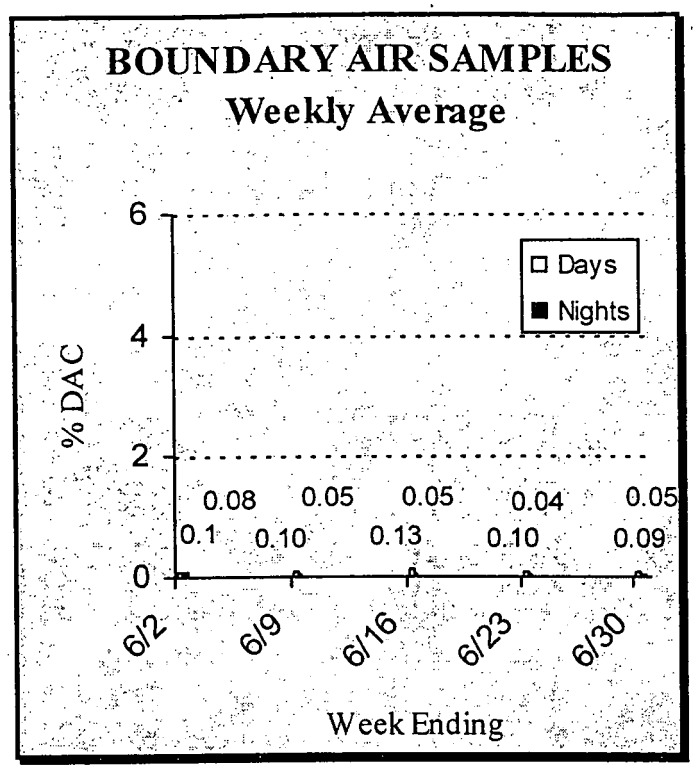


Action level for radiological (occupational) air monitoring is 2% DAC. Isotope of concern is U-238; associated DAC is 2E-11 uCi/ml.

On Site Disposal Facility - June

3192





Project Activities and Events

- Performance of OSDF impacted material placement
- Permanent power to all air samplers; all air samplers run 24 hours/day

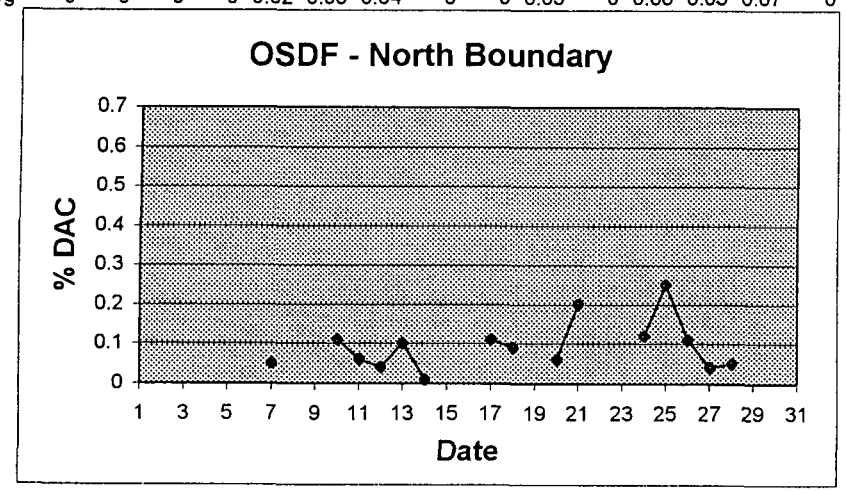
Engineering and Administrative Controls

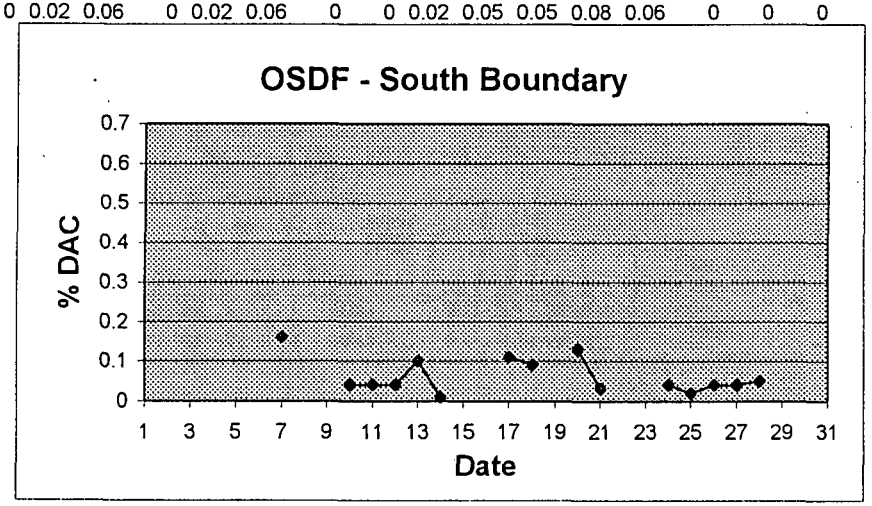
- Water used for dust control in work areas
- Workers remain safe working distance from operating equipment and upwind of potential dust generating activities

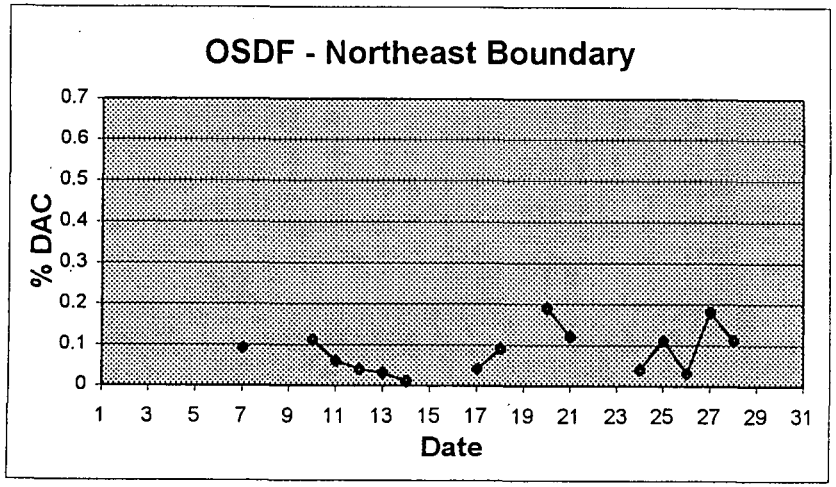
Note: BZA limit - 12 DAC-hrs/week; Boundary limit - 2% DAC averaged over a week

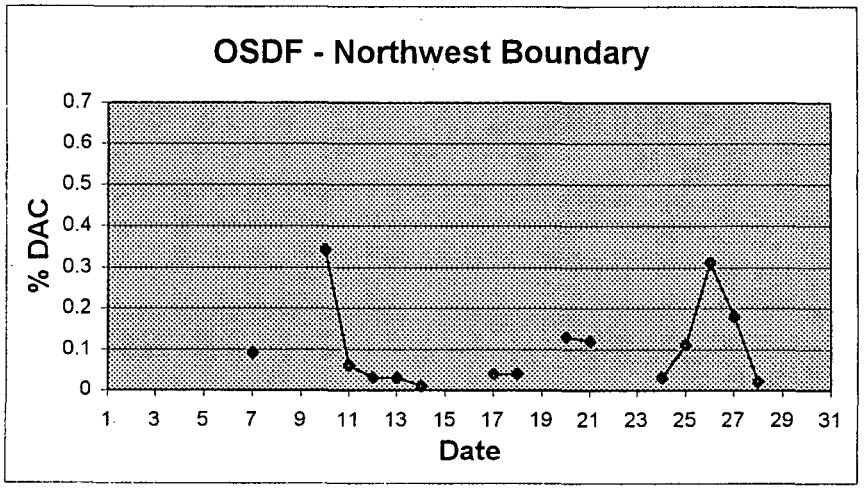
OSDF BOUNDARY AIR SAMPLES - JULY 2000

Day	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
N. BNDY							0.05			0.11	0.06	0.04	0.1	0.01			0.11	0.09		0.06	0.2			0.12	0.25	0.11	0.04	0.05			
S. BNDY							0.16			0.04	0.04	0.04	0.1	0.01			0.11	0.09		0.13	0.03			0.04	0.02	0.04	0.04	0.05			
NE. BNDY							0.09			0.11	0.06	0.04	0.03	0.01			0.04	0.09		0.19	0.12			0.04	0.11	0.03	0.18	0.11			
NW. BNDY							0.09			0.34	0.06	0.03	0.03	0.01			0.04	0.04		0.13	0.12			0.03	0.11	0.31	0.18	0.02			
SE. BNDY							0.09			0.42	0.01	0.04	0.3	0.07			0.18	0.09		0.26	0.05			0.19	0.04	0.11	0.04	0.18			
SW. BNDY							0.16			0.04	0.02	0.03	0.03	0.07			0.11	0.04		0.06	0.27			0.03	0.02	0.38	0.04	0.02			
N. O/N					0.01	0.01	0.01			0.02		0	0.06	0.13			0.02	0.01		0.03	0.02			0.06	0.01	0.02	0.02	0.11			
S. O/N					0.03	0.09	0.01			0.02		0	0.02	0.05			0.01	0.18		0.03	0.19			0.01	0.11	0.07	0.15	0.03			
NE. O/N					0.01	0.04	0.03			0.05		0.19	0.06	0.09			0.03	0.03		0	0.02			0.01	0.03	0.11	0.15	0.15			
NW. O/N					0.02	0.04	0.01			0.03		0	0.06	0.05			0.03	0.06		0.01	0.06			0.01	0.07	0.07	0.06	0.01			
SE. O/N					0.02	0.07	0.11			0.05		0.15	0.02	0.04			0.02	0.06		0.06	0.02			0.01	0.03	0.02	0.02	0.01			
SW. O/N					0.03	0.04	0.06			0		0.15	0.06	0.04			0	0.03		0.01	0.06			0.02	0.03	0.02	0.09	0.07			
days sum	0	0	0	0	0	0	0.64	0	0	1.06	0.25	0.22	0.59	0.18	0	0	0.59	0.44	0	0.83	0.79	0	0	0.45	0.55	0.98	0.52	0.43	0	0	0
days avg	0	0	0	0	0	0	0.11	0	0	0.18	0.04	0.04	0.1	0.03	0	0	0.1	0.07	0	0.14	0.13	0	0	0.08	0.09	0.16	0.09	0.07	0	0	0
nights sum	0	0	0	0	0.12	0.29	0.23	0	0	0.17	0	0.49	0.28	0.4	0	0	0.11	0.37	0	0.14	0.37	0	0	0.12	0.28	0.31	0.49	0.38	0	0	0
nights avg	0	0	0	0	0.02	0.05	0.04	0	0	0.03	0	0.08	0.05	0.07	0	0	0.02	0.06	0	0.02	0.06	0	0	0.02	0.05	0.05	0.08	0.06	0	0	0





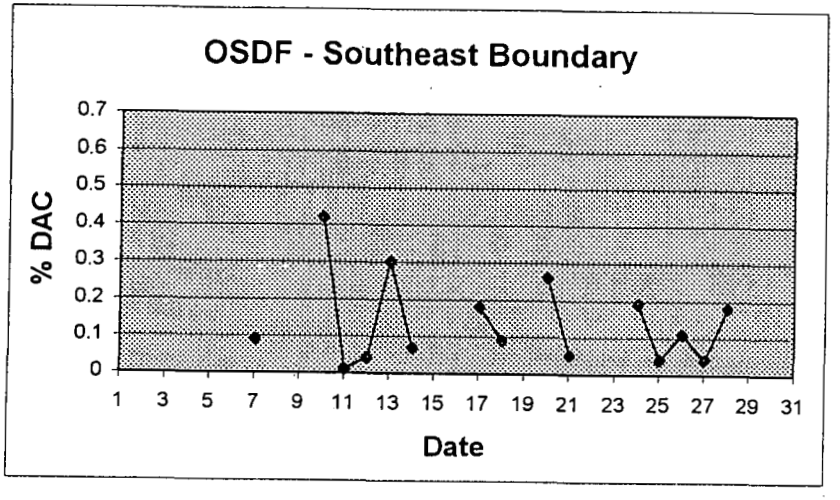


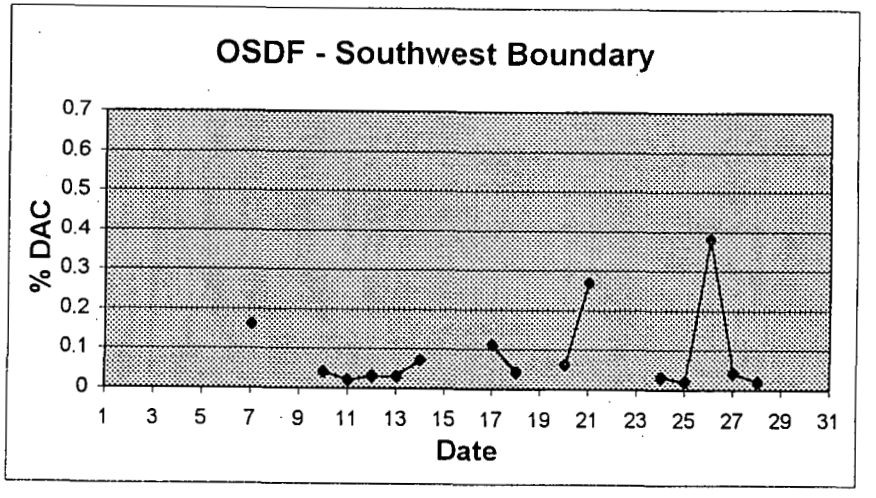


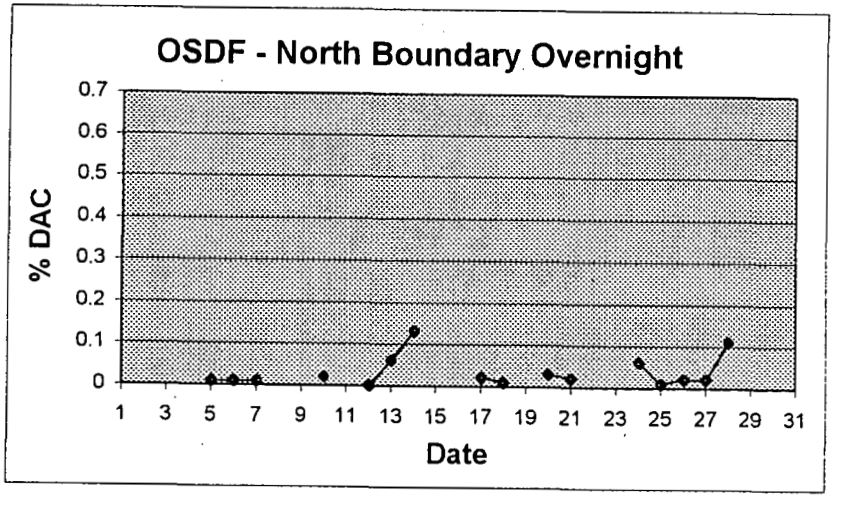
Action level for radiological (occupational) air monitoring is 2% DAC. Isotope of concern is U-238; associated DAC is 2E-11 uCi/ml.

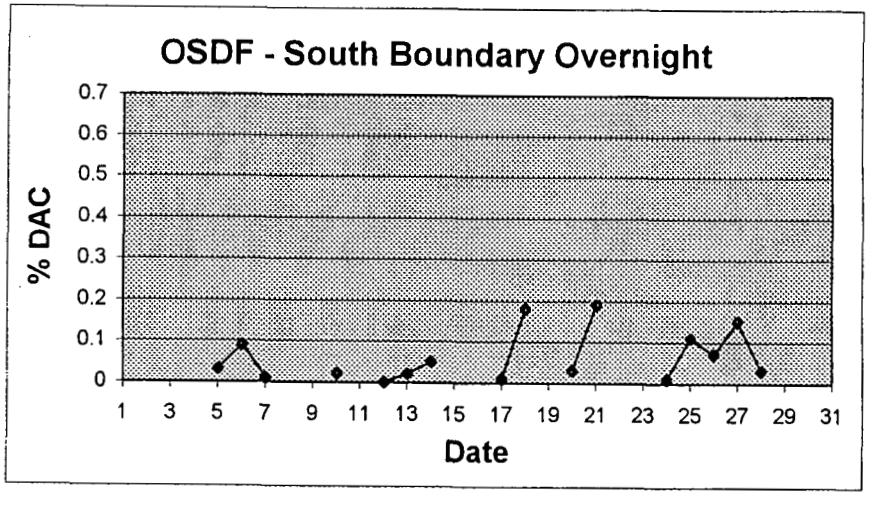
000014

OSDF BOUNDARY AIR SAMPLES - JULY 2000









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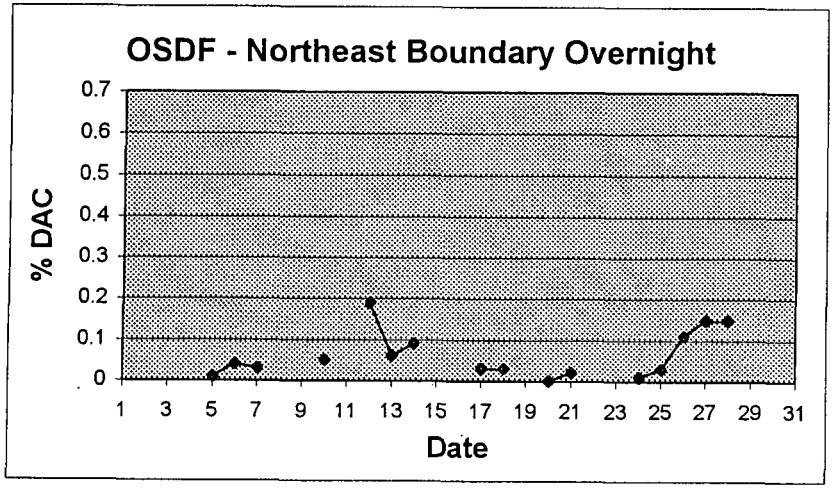
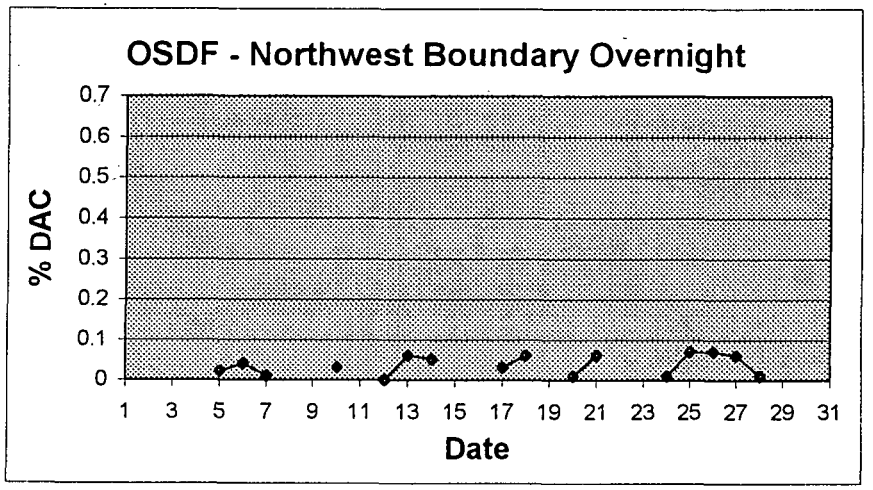
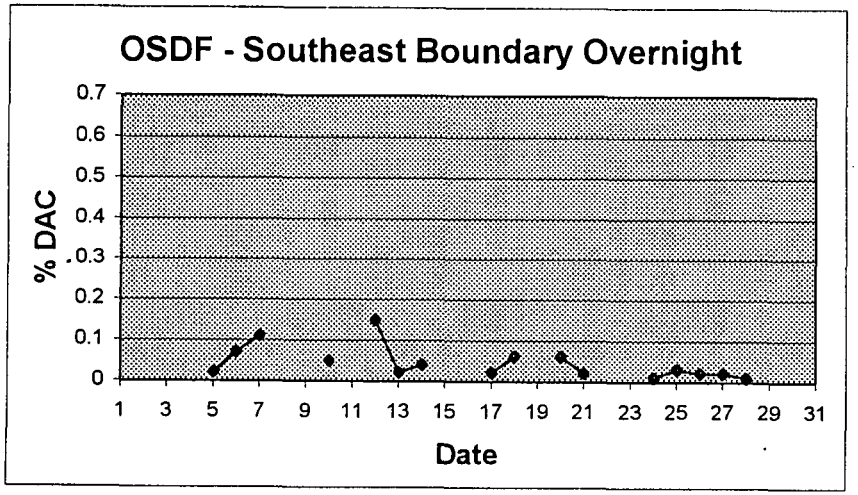
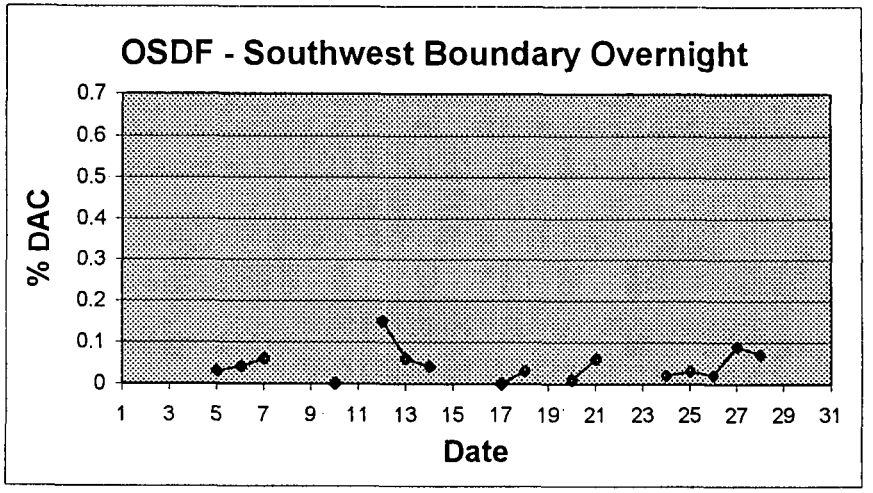
Action level for radiological (occupational) air monitoring is 2% DAC. Isotope of concern is U-238; associated DAC is 2E-11 uCi/ml.

OSDF BOUNDARY AIR SAMPLES - JULY 2000









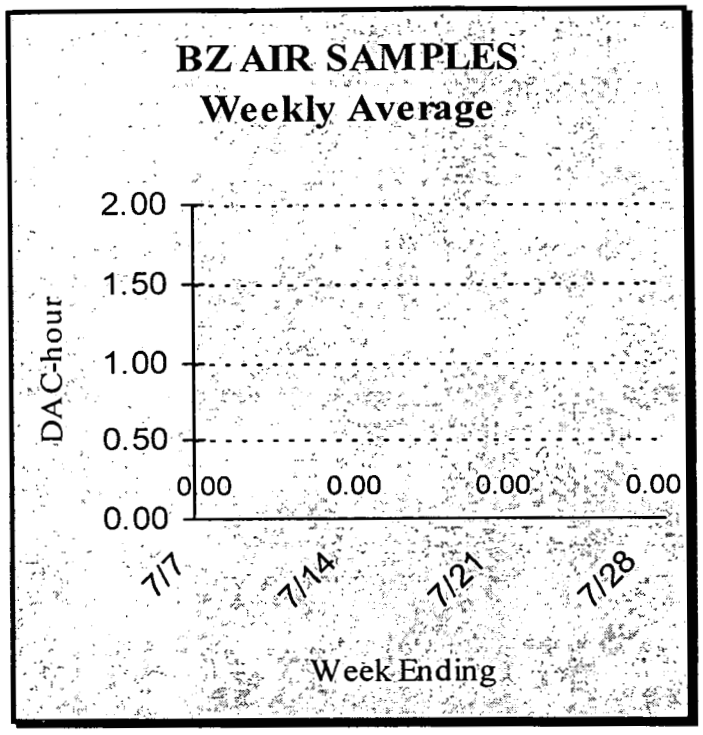
Action level for radiological (occupational) air monitoring is 2% DAC. Isotope of concern is U-238; associated DAC is 2E-11 uCi/ml.

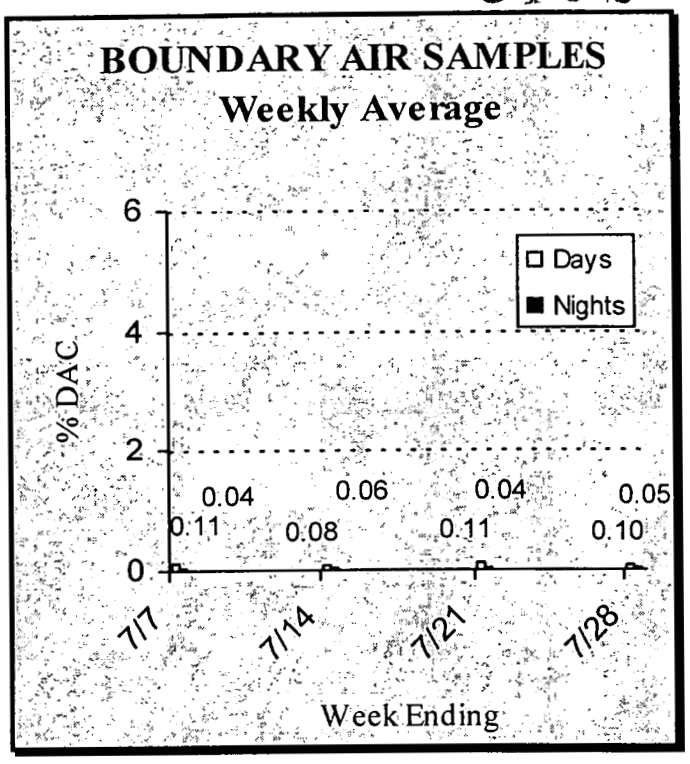
000016

3192

On Site Disposal Facility - July

3192





Project Activities and Events

- Performance of OSDF impacted material placement
- Permanent power to all air samplers; all air samplers run 24 hours/day

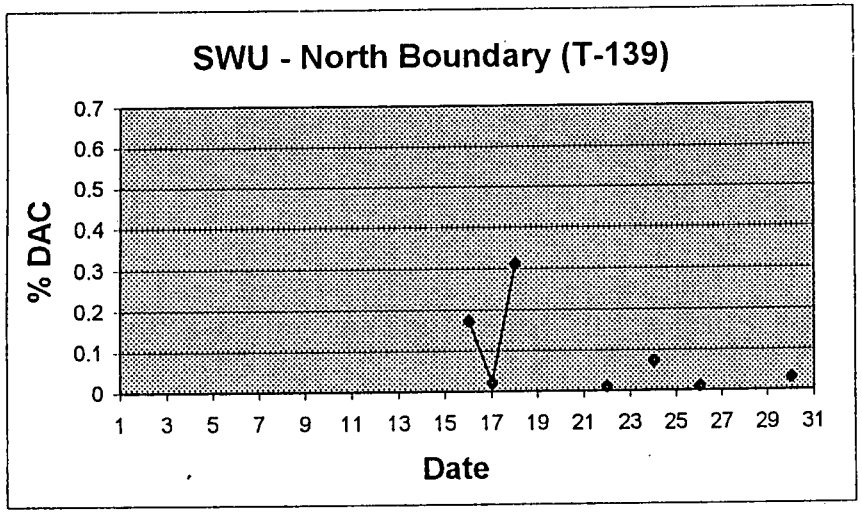
Engineering and Administrative Controls

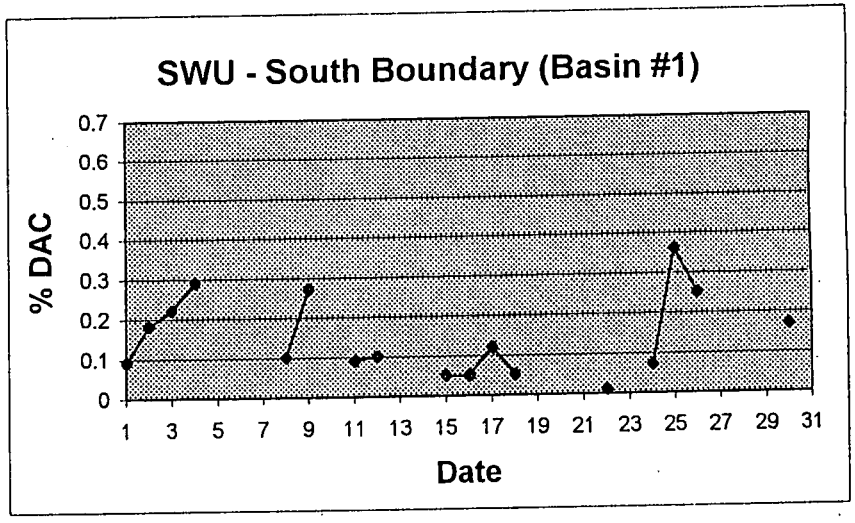
- Water used for dust control in work areas
- Workers remain safe working distance from operating equipment and upwind of potential dust generating activities

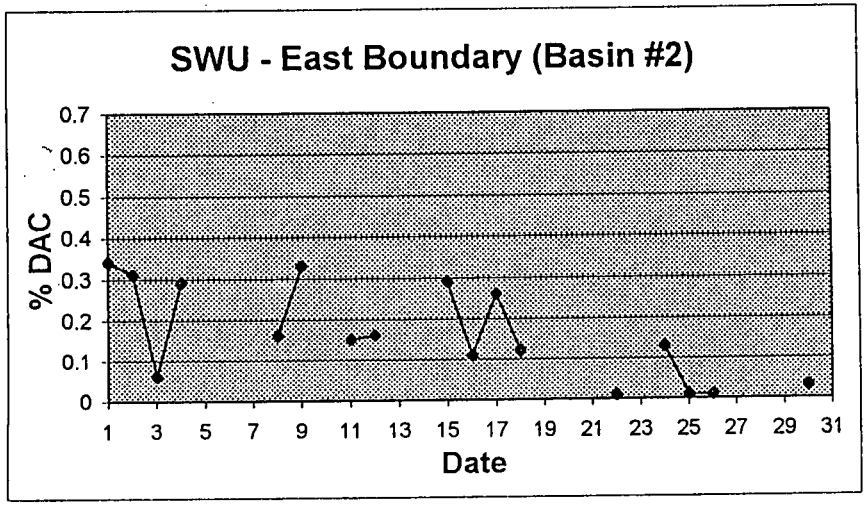
Note: BZA limit - 12 DAC-hrs/week; Boundary limit - 2% DAC averaged over a week

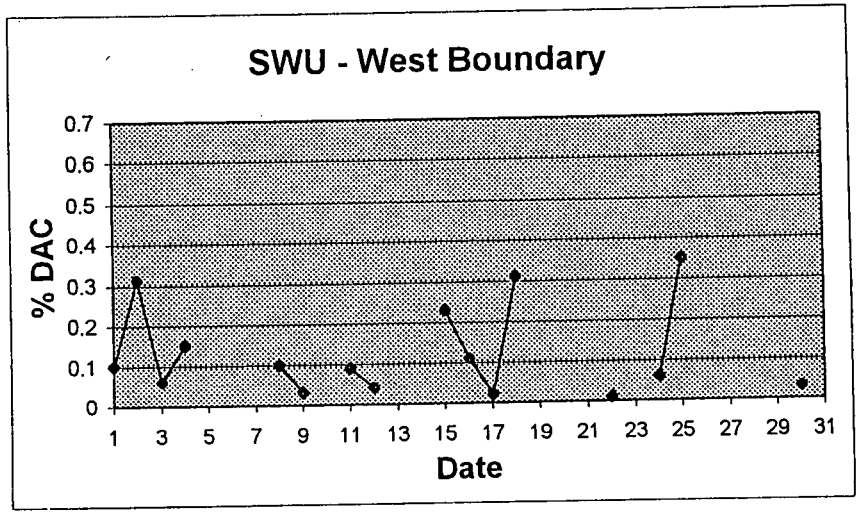
SWU BOUNDARY AIR SAMPLES - MAY 2000

Day	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
N. BNDY																0.17	0.02	0.31				0.01		0.07		0.01				0.03	
S. BNDY	0.09	0.18	0.22	0.29				0.1	0.27		0.09	0.1			0.05	0.05	0.12	0.05				0.01		0.07	0.36	0.25				0.17	
E. BNDY	0.34	0.31	0.06	0.29				0.16	0.33		0.15	0.16			0.29	0.11	0.26	0.12				0.01		0.13	0.01	0.01				0.03	
W. BNDY	0.1	0.31	0.06	0.15				0.1	0.03		0.09	0.04			0.23	0.11	0.02	0.31				0.01		0.06	0.35					0.03	
AFP																															
BASIN #3																															
sum	0.53	0.8	0.34	0.73	0	0	0	0.36	0.63	0	0.33	0.3	0	0	0.57	0.44	0.42	0.79	0	0	0	0.04	0	0.33	0.72	0.27	0	0	0	0.26	0
avg.	0.18	0.27	0.11	0.24	0	0	0	0.12	0.21	0	0.11	0.1	0	0	0.19	0.11	0.11	0.2	0	0	0	0.01	0	0.08	0.24	0.09	0	0	0	0.07	0
Ra E	0.39	0.15	0.13	0.04				0.04	0.04		0.09	0.3			0.02																
Ra NE	0.18	0.02	0.13	0.18				0.44	0.22		0.28	0.24			0.26																
Ra SW	0.03	0.08	0.2	0.04				0.17	0.09		0.03	0.04			0.26																
sum	0.6	0.25	0.46	0.26	0	0	0	0.65	0.35	0	0.4	0.58	0	0	0.54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
avg.	0.2	0.08	0.15	0.09	0	0	0	0.22	0.12	0	0.13	0.19	0	0	0.18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0







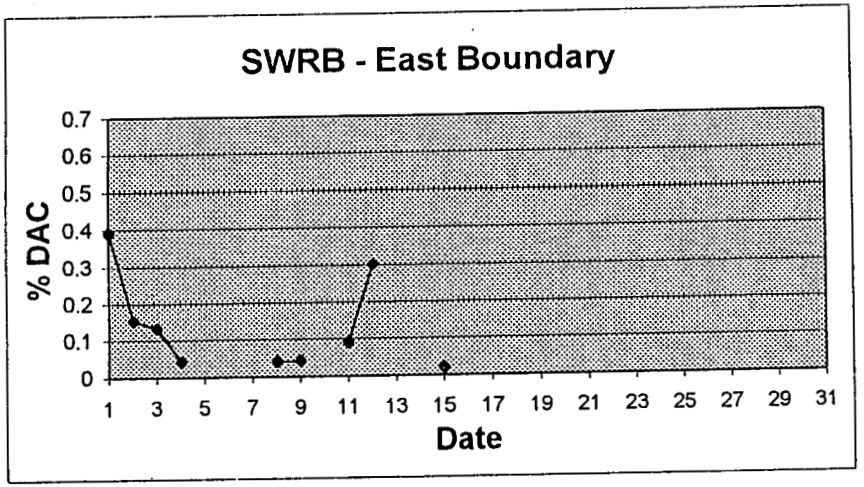


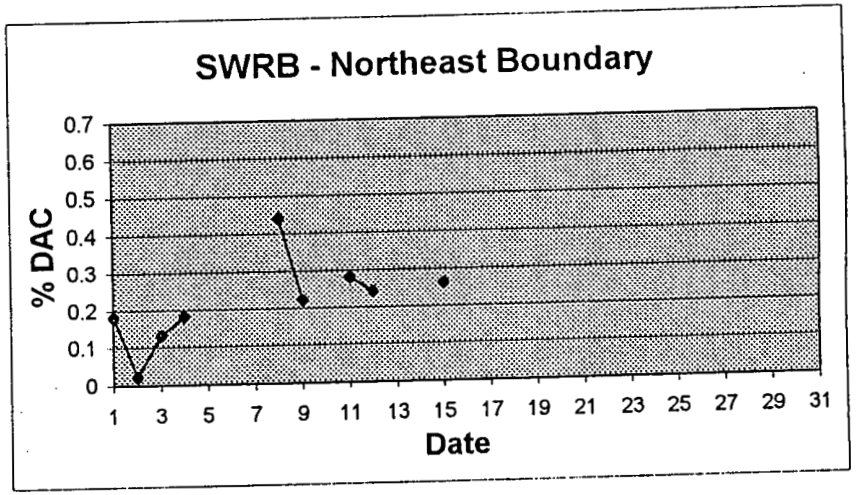
Action level for radiological (occupational) air monitoring is 2% DAC. Isotope of concern is U-238; associated DAC is 2E-11 uCi/ml.

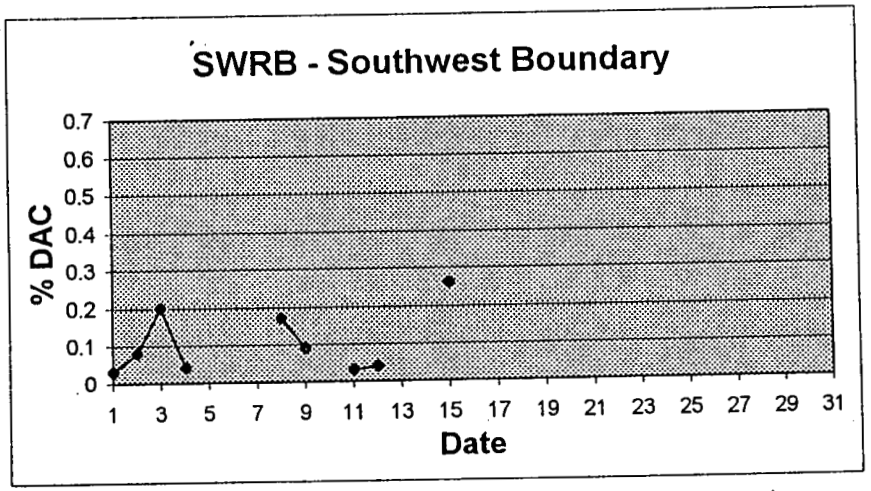
000018

2192

SWRB Ra H/S BOUNDARY AIR SAMPLES - MAY 2000



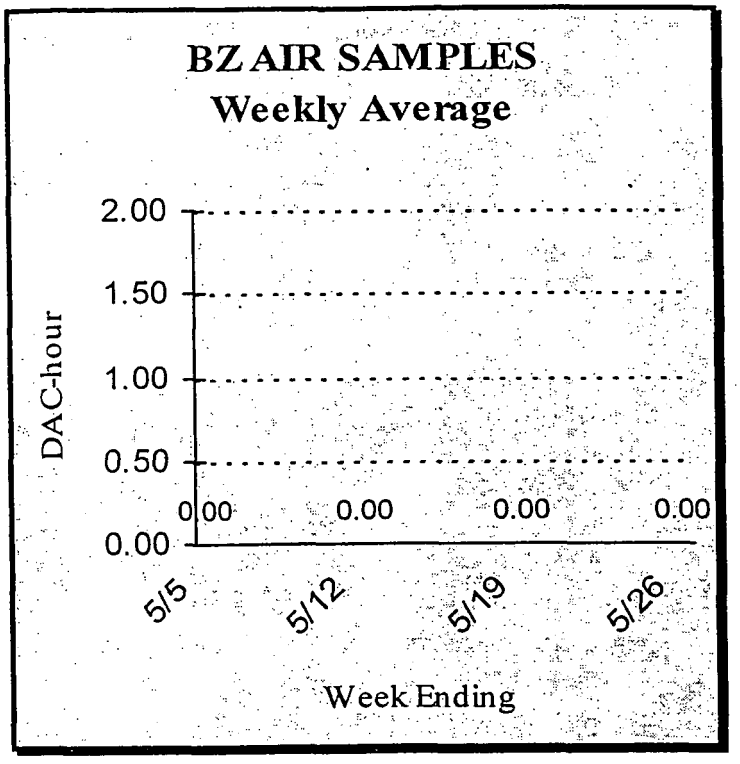


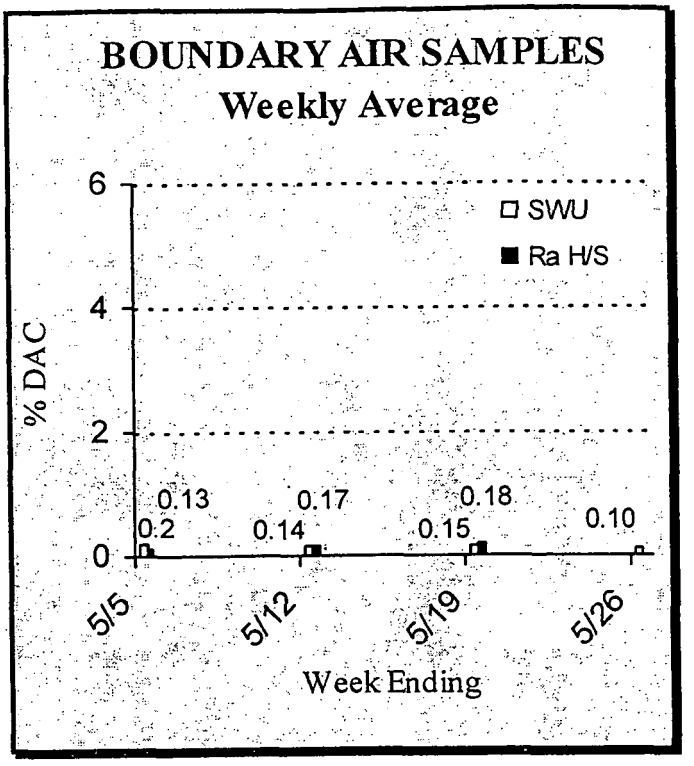


Action level for radiological (occupational) air monitoring is 2% DAC. Isotope of concern is U-238; associated DAC is 2E-11 uCi/ml.

Southern Waste Units - May

3192





Project Activities and Events

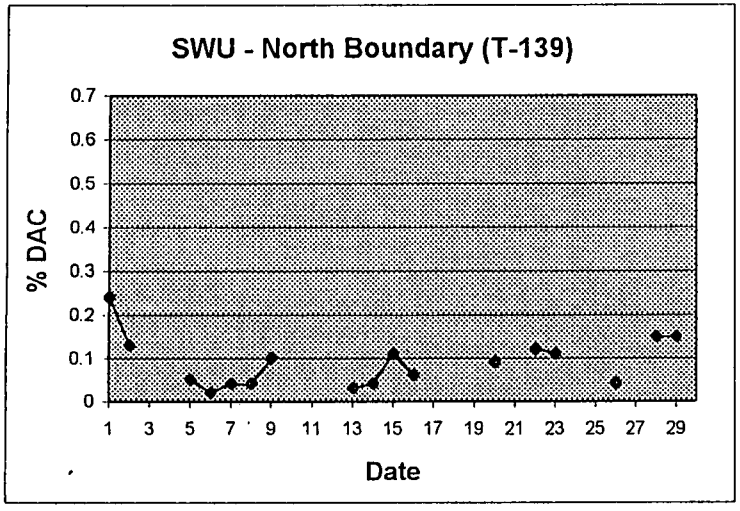
- Hauling of materials from SWU, excavating from South Field area
- Excavation of debris/asbestos from areas on SWU and preparation for transport to OSDF
- Preparation for removal of extraneous soil piles and soil including SP-2, SP-3, and SP-4
- Hauling of SWRB (Ra H/S) soils to OSDF during 5/1-5/15

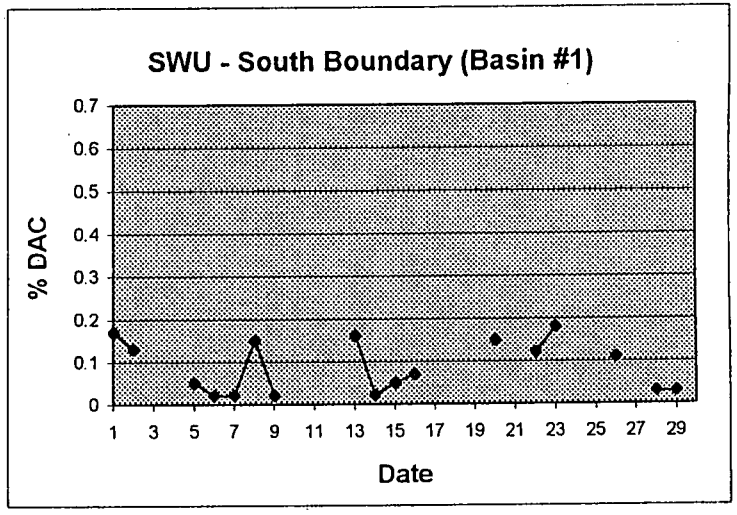
Engineering and Administrative Controls

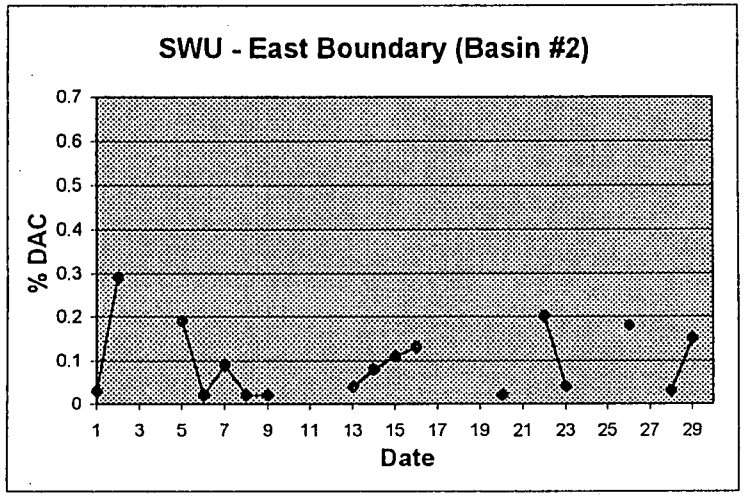
- Water application for dust control;
- Controlled loading of equipment to prevent the spread of contamination
- Restricted release controls for SWRB excavation and hauling
- Note: BZA limit -12 DAC-hrs/week; Boundary limit - 2% DAC averaged over a week

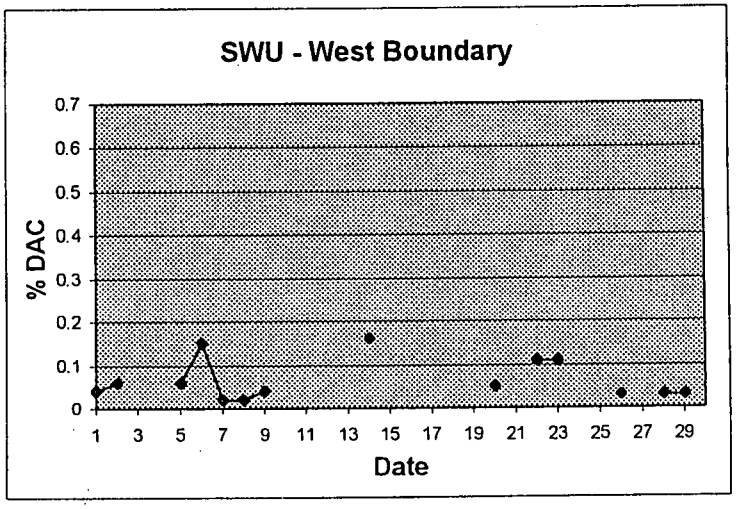
SWU BOUNDARY AIR SAMPLES - JUNE 2000

Day	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
N. BNDY	0.2	0.1			0.05	0	0	0	0.1				0	0	0.1	0.1				0.1		0.1	0.1			0		0.2	0.2	
S. BNDY	0.2	0.1			0.05	0	0	0.2	0				0.2	0	0.1	0.1				0.2		0.1	0.2			0.1		0	0	
E. BNDY	0	0.3			0.19	0	0.1	0	0				0	0.1	0.1	0.1				0		0.2	0			0.2		0	0.2	
W. BND	0	0.1			0.06	0.2	0	0	0					0.2						0.1		0.1	0.1			0		0	0	
AFP																														
BASIN #3																														
sum	0.5	0.6	0	0	0.4	0.2	0.2	0.2	0.2	0	0	0	0.2	0.3	0.3	0.3	0	0	0	0.3	0	0.6	0.4	0	0	0.4	0	0.2	0.4	0
avg.	0.1	0.2	0	0	0.1	0.1	0	0.1	0	0	0	0	0.1	0.1	0.1	0.1	0	0	0	0.1	0	0.1	0.1	0	0	0.1	0	0.1	0.1	0
Ra E																														
Ra NE																														
Ra SW																														
sum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
avg.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



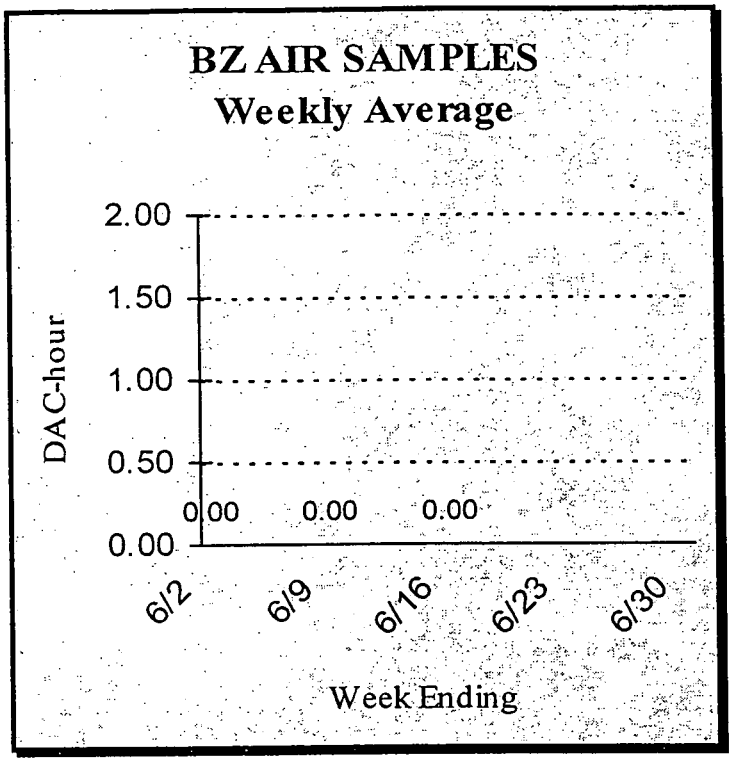


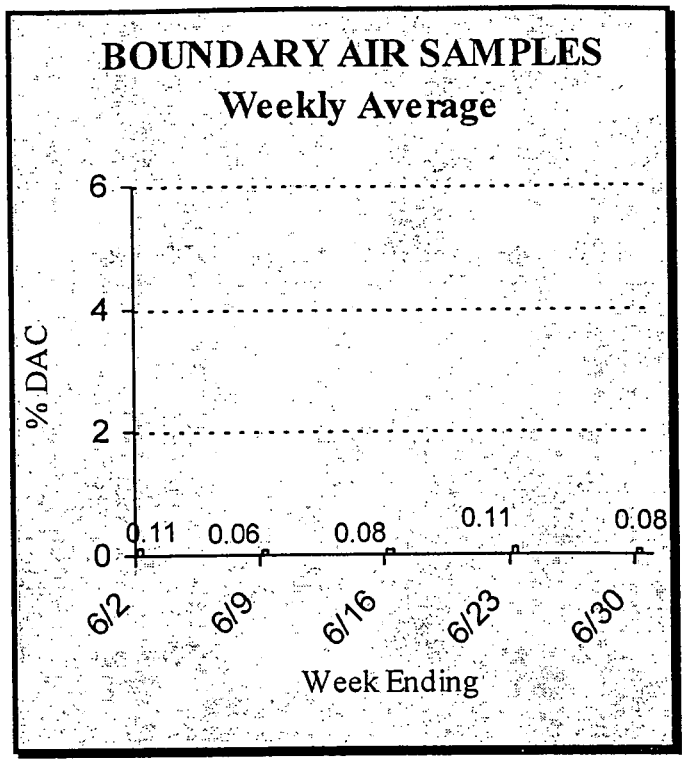




Action level for radiological (occupational) air monitoring is 2% DAC. Isotope of concern is U-238; associated DAC is 2E-11 uCi/ml.

Southern Waste Units - June





Project Activities and Events

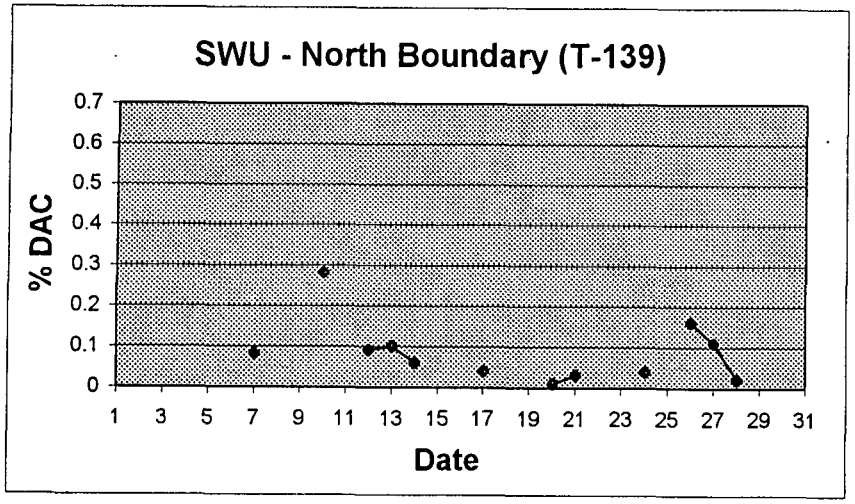
- Hauling of materials from SWU, excavating from South Field area
- Excavation of debris/asbestos from areas on SWU and preparation for transport to OSDF
- Removal of material from SP-3
- BZA data for W/E 6/2 through 6/16 - listed; for 6/23 and 6/30 - N/A

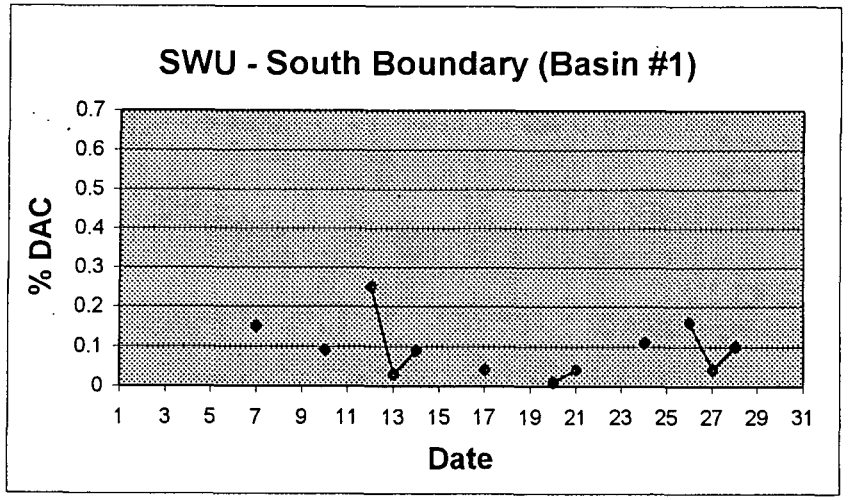
Engineering and Administrative Controls

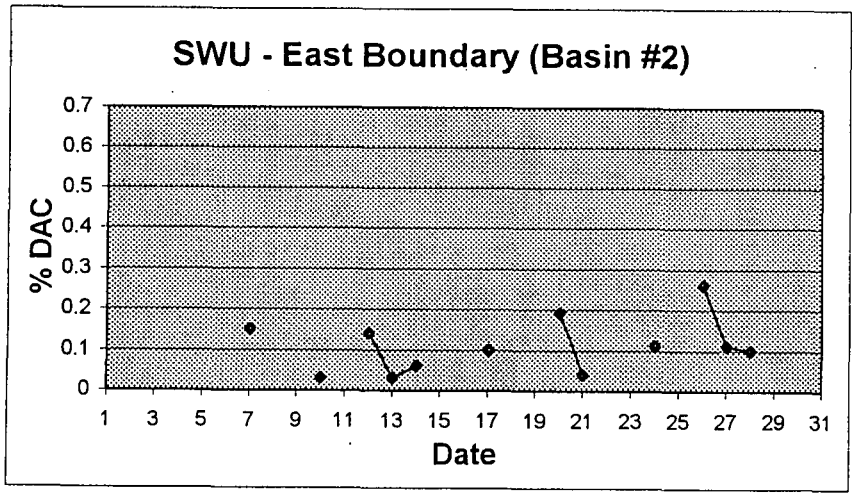
- Water application for dust control;
- Controlled loading of equipment to prevent the spread of contamination
- Restricted release controls for SWRB excavation and hauling
- Note: BZA limit -12 DAC-hrs/week; Boundary limit - 2% DAC averaged over a week

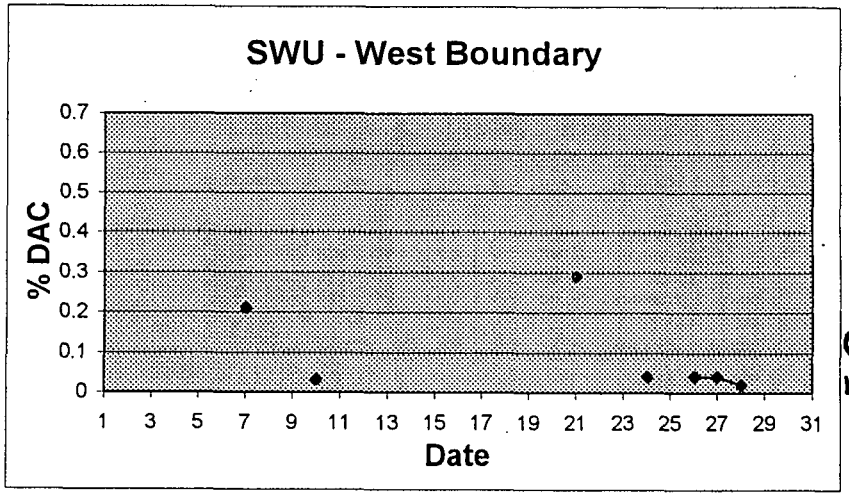
SWU BOUNDARY AIR SAMPLES - JULY 2000

Day	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
N. BNDY							0.08			0.28		0.09	0.1	0.06			0.04			0.01	0.03			0.04		0.16	0.11	0.02			
S. BNDY							0.15			0.09		0.25	0.03	0.09			0.04			0.01	0.04			0.11		0.16	0.04	0.1			
E. BNDY							0.15			0.03		0.14	0.03	0.06			0.1			0.19	0.04			0.11		0.26	0.11	0.1			
W. BNDY							0.21			0.03											0.29			0.04		0.04	0.04	0.02			
AFP																															
BASIN #3																															
sum	0	0	0	0	0	0	0.59	0	0	0.43	0	0.48	0.16	0.21	0	0	0.18	0	0	0.21	0.4	0	0	0.3	0	0.62	0.3	0.24	0	0	0
avg.	0	0	0	0	0	0	0.15	0	0	0.11	0	0.16	0.05	0.07	0	0	0.06	0	0	0.07	0.1	0	0	0.08	0	0.16	0.08	0.06	0	0	0
Th N																				11.5	3.6										
Th S																				3.1	2.6										
Th W																				10.8	4.6										
sum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25.3	10.8	0	0	0	0	0	0	0	0	0	0
avg.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8.45	3.6	0	0	0	0	0	0	0	0	0	0







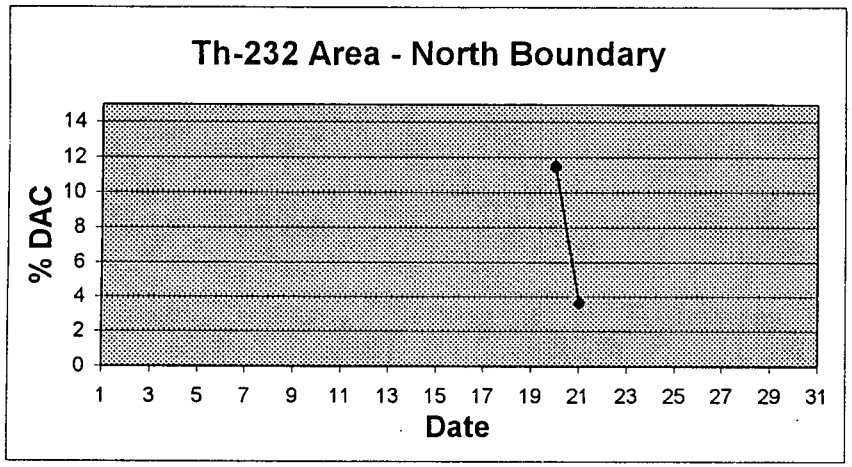


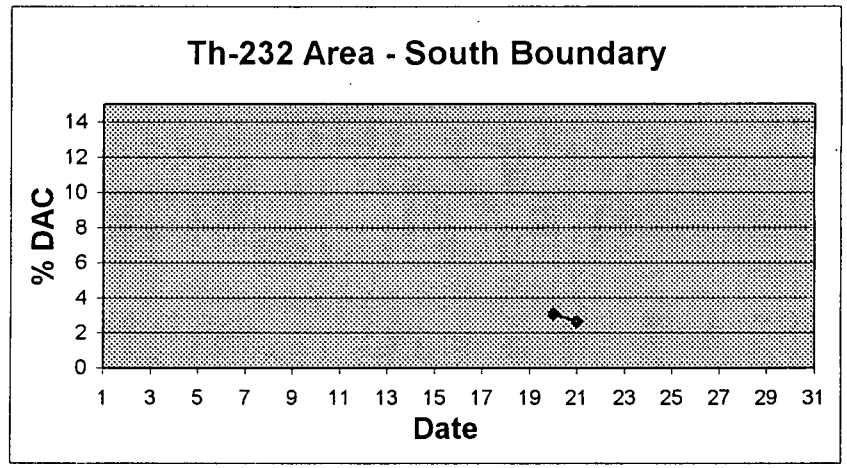
Action level for radiological (occupational) air monitoring is 2% DAC. Isotope of concern is U-238; associated DAC is 2E-11 uCi/ml.

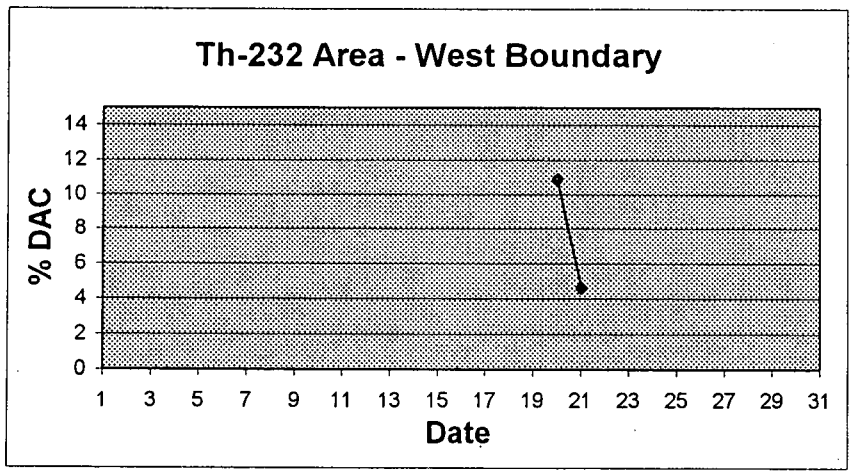
000023

3192

SWU Th-232 AREA BOUNDARY AIR SAMPLES - JULY 2000



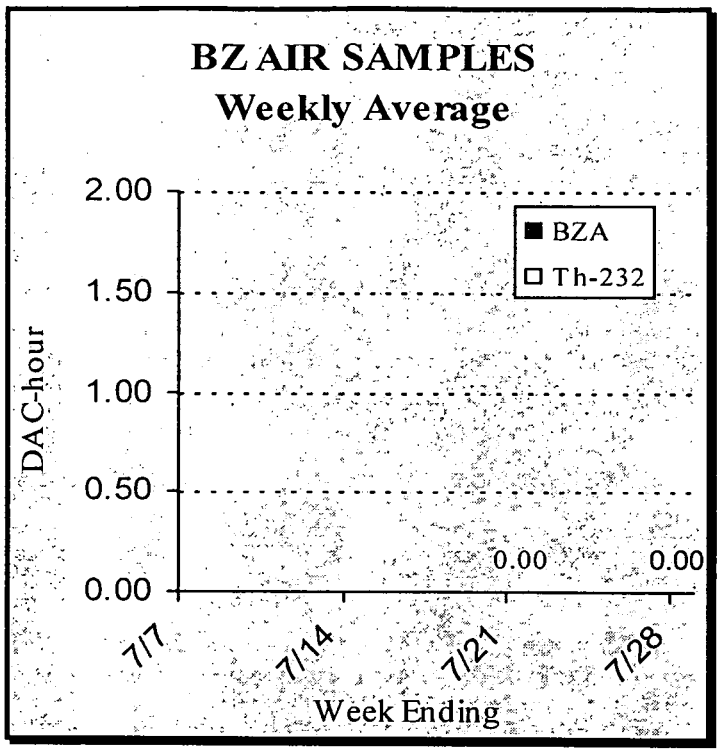


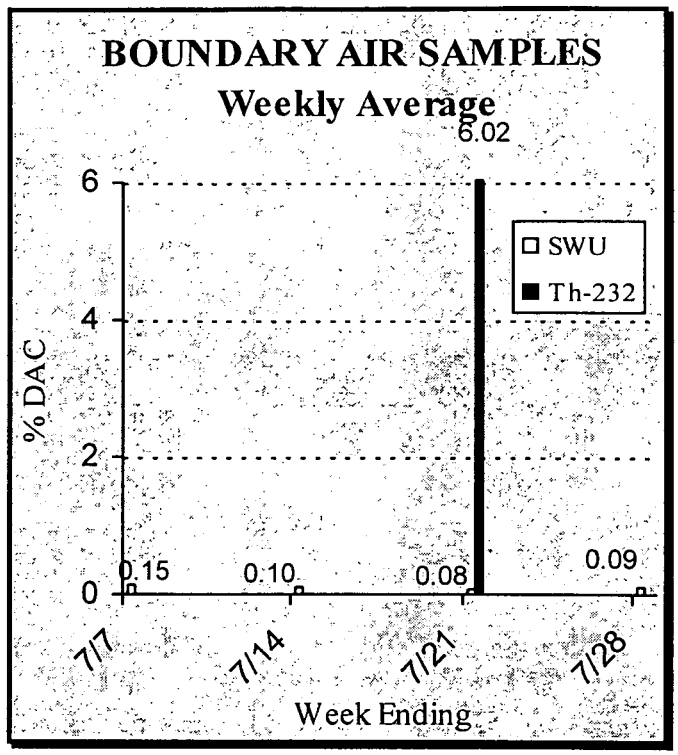


Action level for radiological (occupational) air monitoring is 2% DAC. Isotope of concern is U-238; associated DAC is 2E-11 uCi/ml.

Southern Waste Units - July

3192





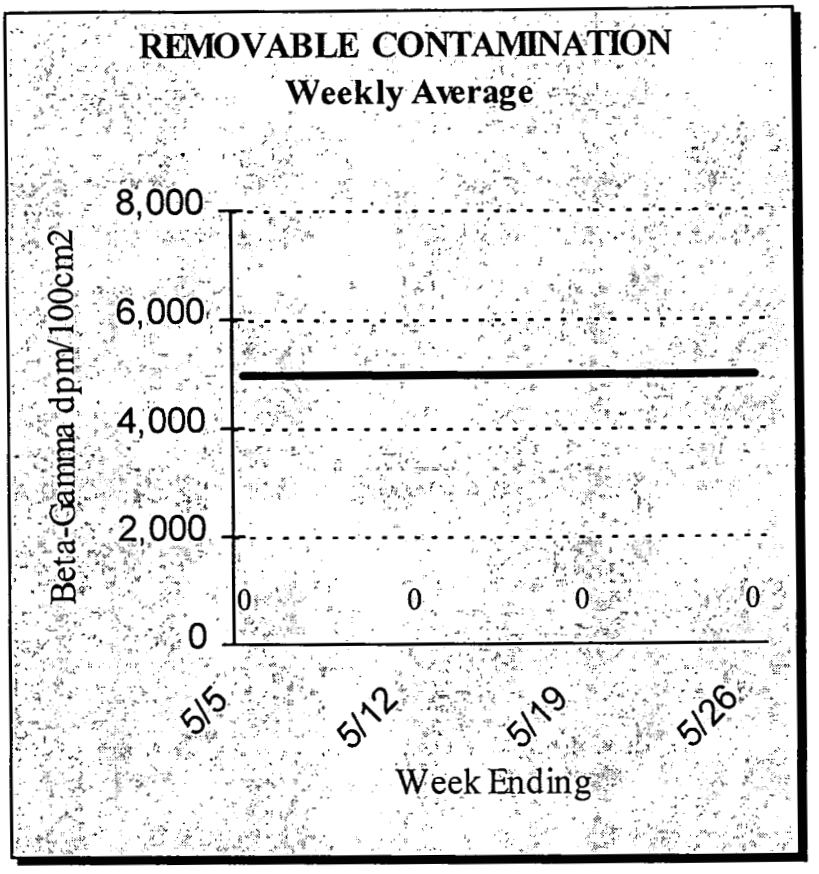
Project Activities and Events

- Hauling of materials from SWU, excavating from South Field area
- Excavation of debris/asbestos from areas on SWU and preparation for transport to OSDF
- Removal of material from SP-3
- BZA data for W/E 7/28 (U-238) and 7/21 (Th-232) - listed; for 7/7-7/21 (U-238) and 7/7-7/14, 7/28 (Th-232) - N/A
- Excavation and loading of Th-232 SWU materials on W/E 7/21; Boundary for Th-232 is Th-232 boundary within U-238 Contamination Area

Engineering and Administrative Controls

- Water application for dust control;
- Controlled loading of equipment to prevent the spread of contamination
- Restricted release controls for SWRB excavation and hauling
- Note: BZA limit -12 DAC-hrs/week; Boundary limit - 2% DAC averaged over a week

Haul Road - May



Project Activities and Events

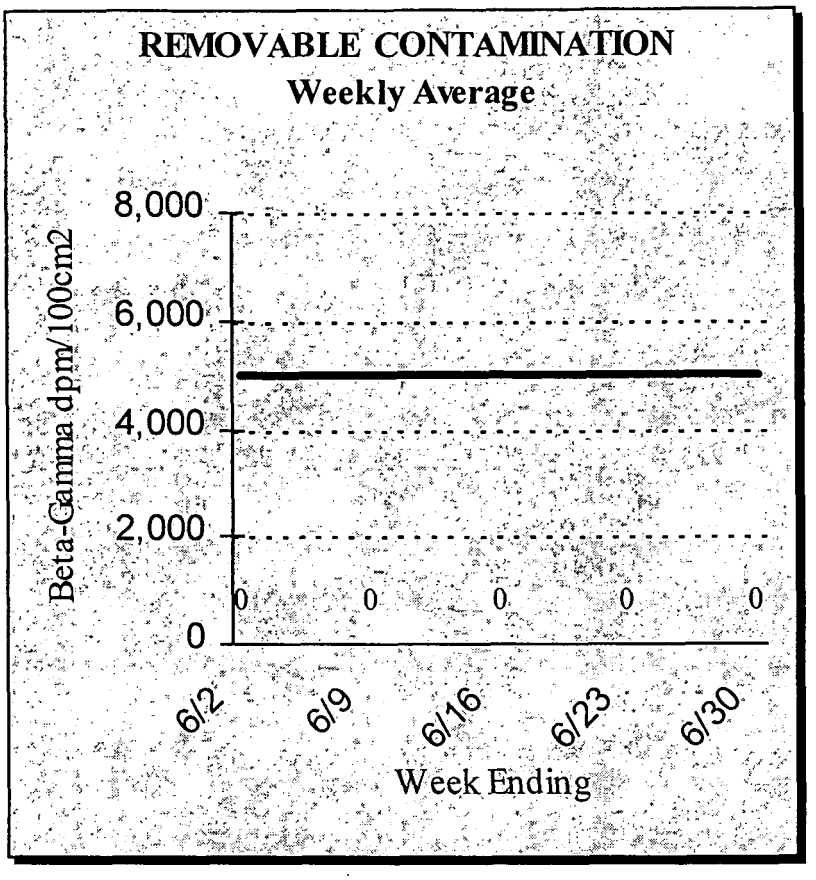
- Hauling from SWU (including SP-3) and OMTA to OSDF;
- Wheel washing of all equipment entering the HR from SWU or OSDF (automated WWF with manual assist as necessary
- Use of articulating trucks to haul from SWU (no tarps with bed misting from WWF)

Engineering and Administrative Controls

- HR posted as a Radiological Buffer Area for the entire length (from OSDF to SWU), with the exception of the established crossings, during this time period
- Bed spray for untarped haul vehicles

Note: Contamination level "limit" for HR activities - 1000 dpm/100cm^2 (0 on graph indicates less than 1000 dpm/100cm^2)

Haul Road - June



Project Activities and Events

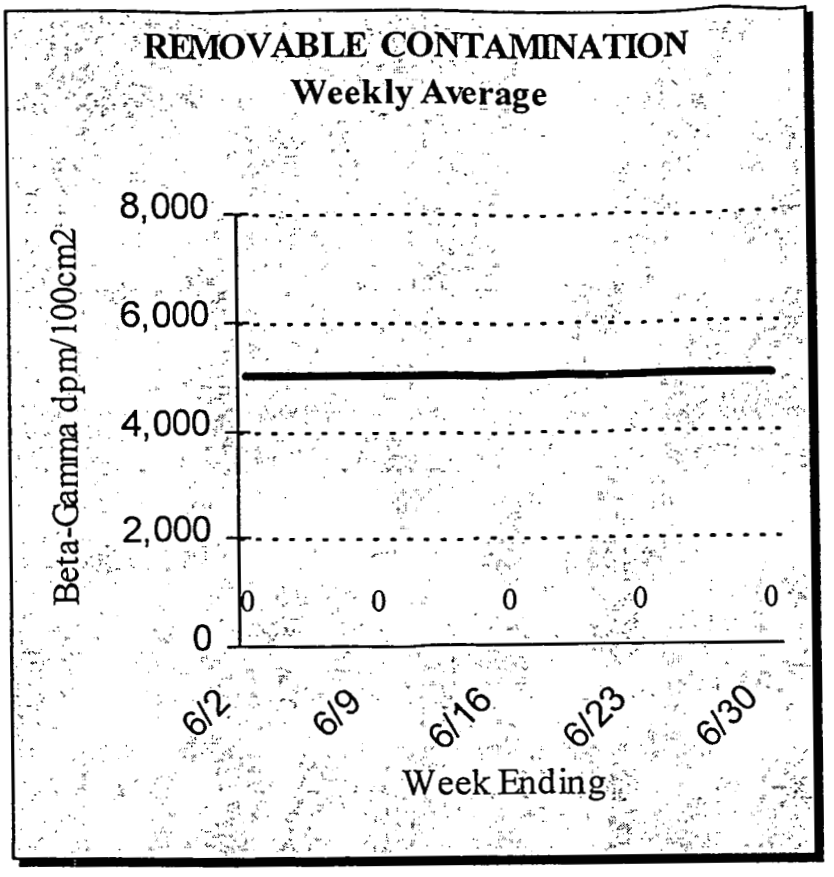
- Hauling from SWU (including SP-3), K-65 Silos parking area, and OMTA to OSDF;
- Wheel washing of all equipment entering the HR from SWU or OSDF (automated WWF with manual assist as necessary
- Use of articulating trucks to haul from SWU (no tarps with bed misting from WWF)
- Use of controlled loading processes to prevent spread of materials to outside of truck beds

Engineering and Administrative Controls

- HR posted as a Radiological Buffer Area for the entire length (from OSDF to SWU), with the exception of the established crossings, during this time period
- Bed spray for untarped haul vehicles

Note: Contamination level "limit" for HR activities - 1000 dpm/100cm^2 (0 on graph indicates less than 1000 dpm/100cm^2)

Haul Road - July



Project Activities and Events

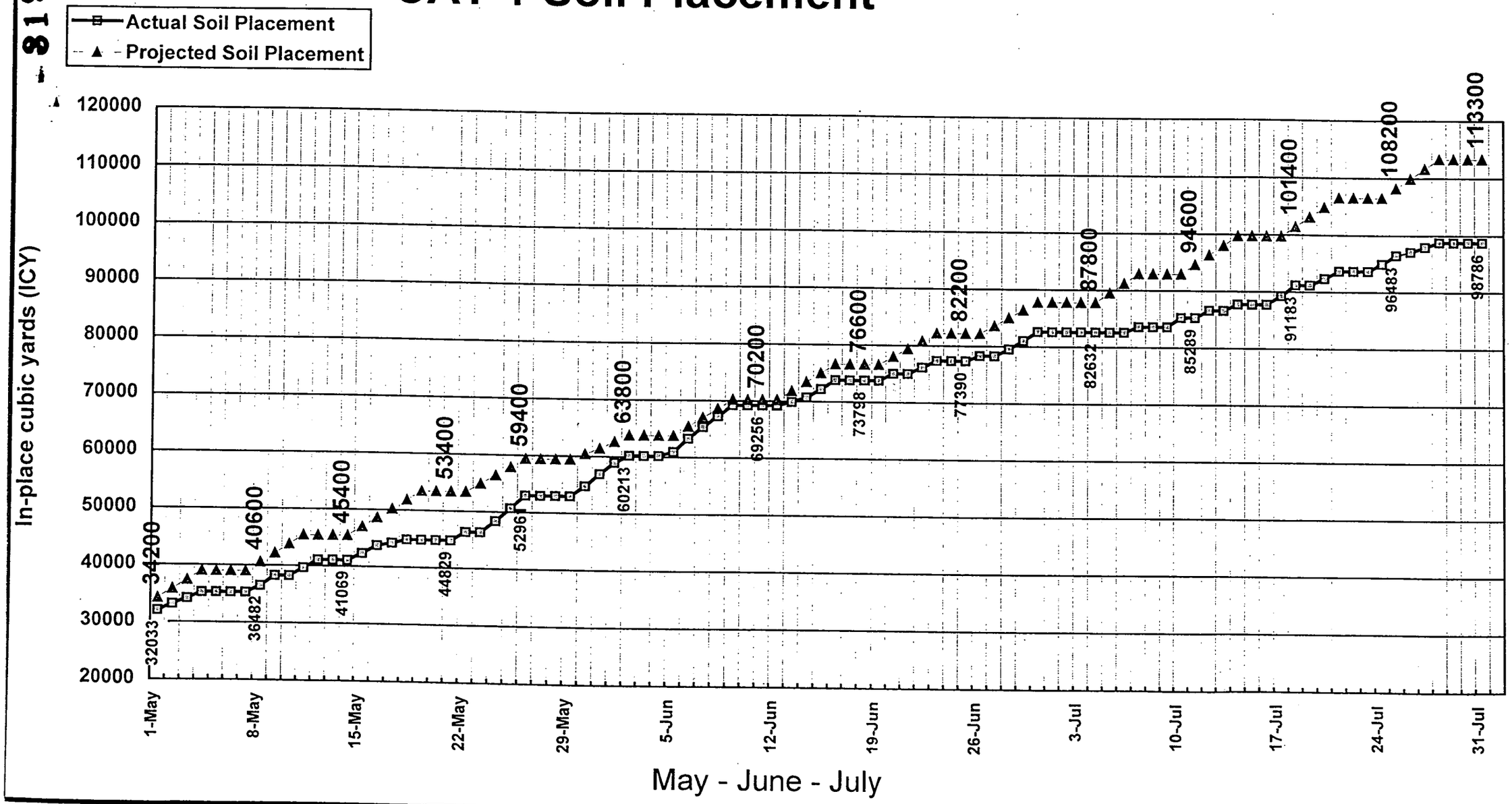
- Hauling from SWU (including SP-3), K-65 Silos parking area, and OMTA to OSDF;
- Wheel washing of all equipment entering the HR from SWU or OSDF (automated WWF with manual assist as necessary
- Use of articulating trucks to haul from SWU (no tarps with bed misting from WWF)
- Use of controlled loading processes to prevent spread of materials to outside of truck beds

Engineering and Administrative Controls

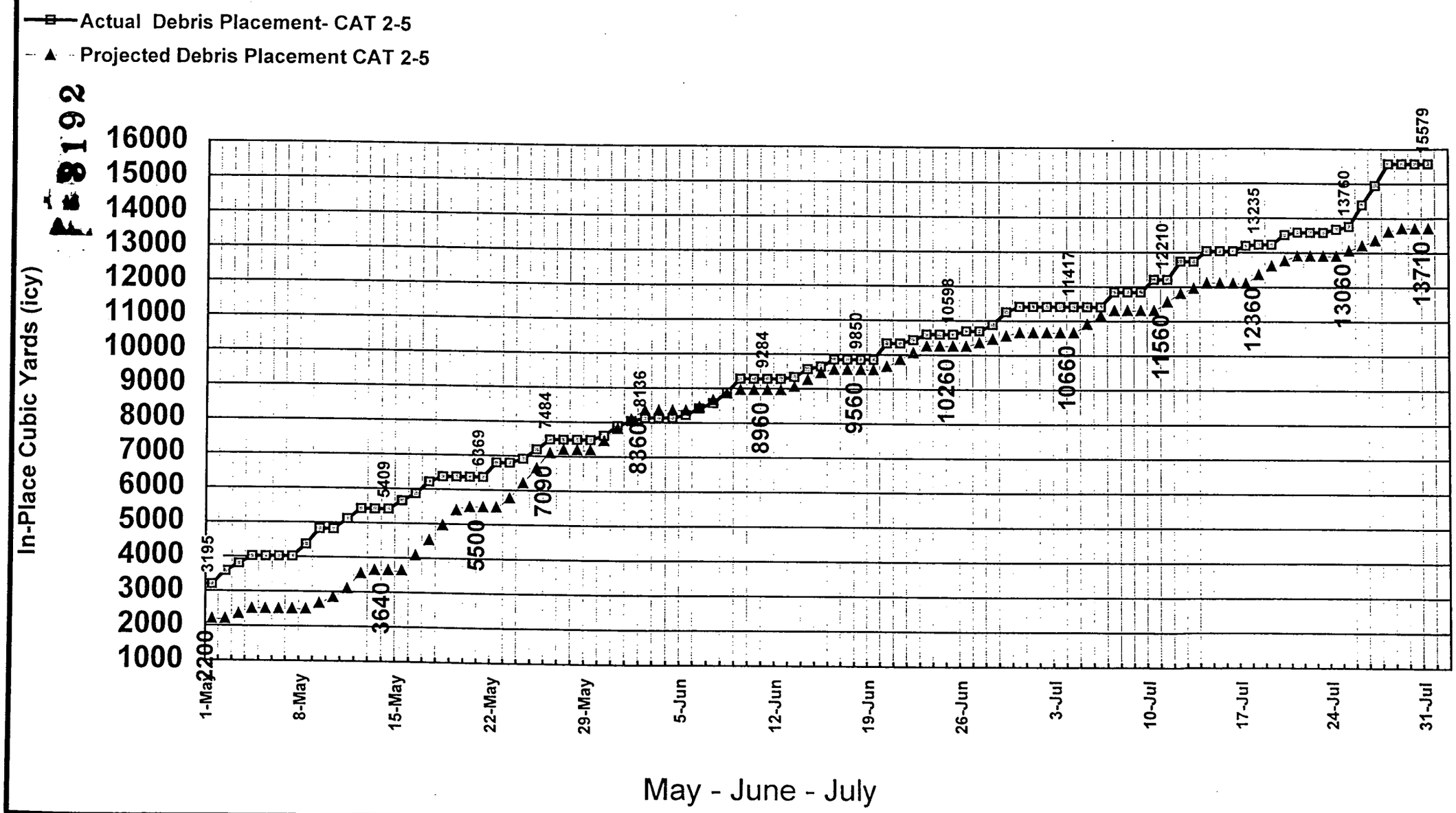
- HR posted as a Radiological Buffer Area for the entire length (from OSDF to SWU), with the exception of the established crossings, during this time period
- Bed spray for untarped haul vehicles

Note: Contamination level "limit" for HR activities - 1000 dpm/100cm^2 (0 on graph indicates less than 1000 dpm/100cm^2)

CAT 1 Soil Placement



Debris Placement

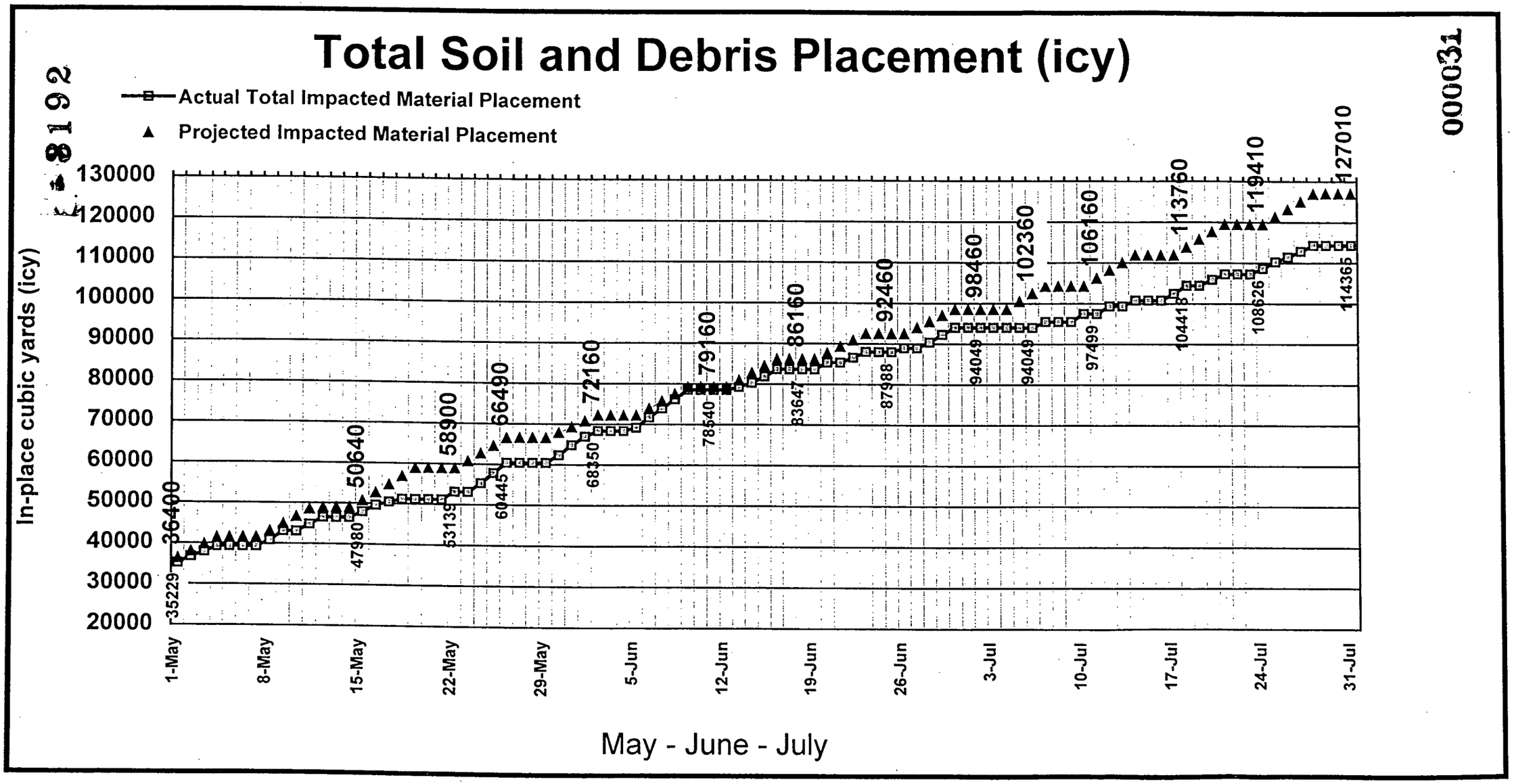


000030

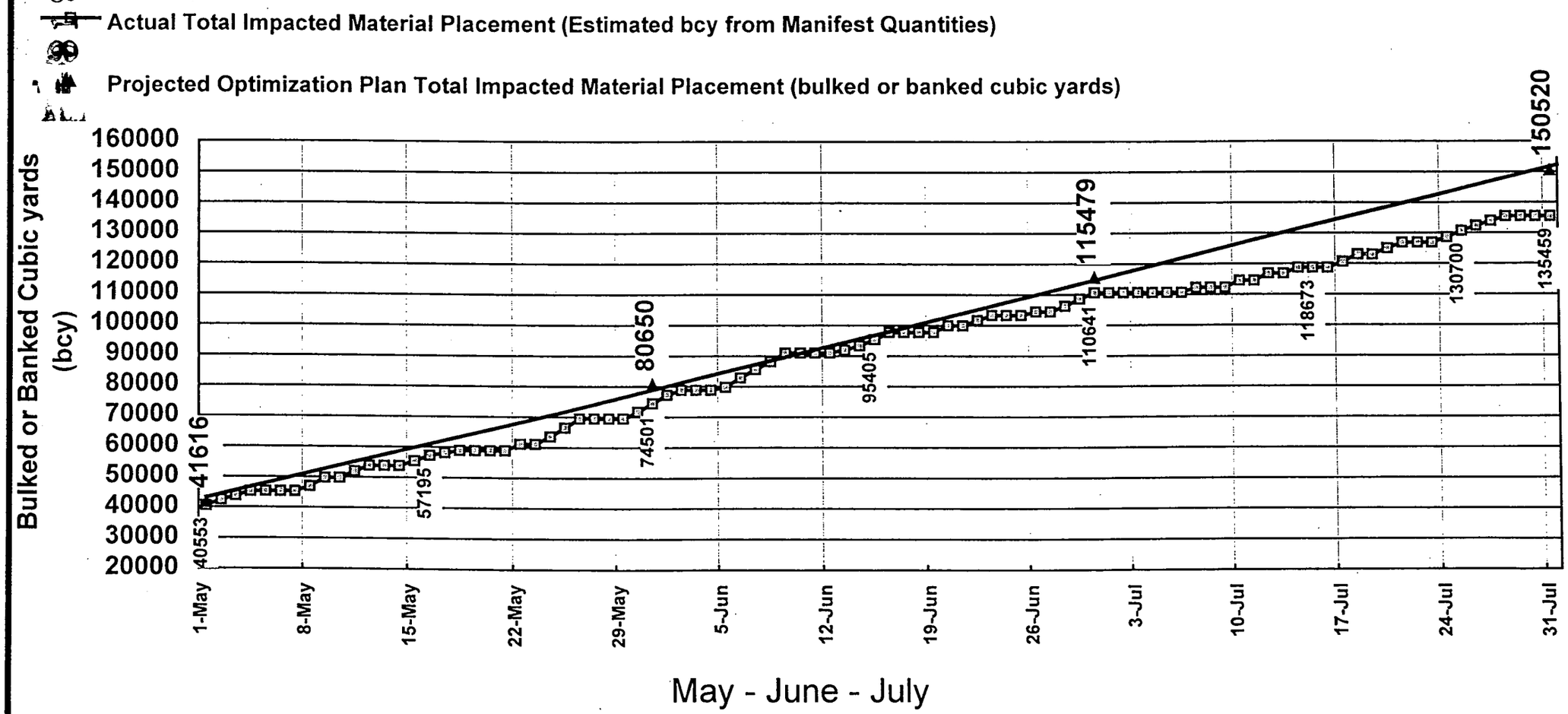
Total Debris Chart 1

8/3/00

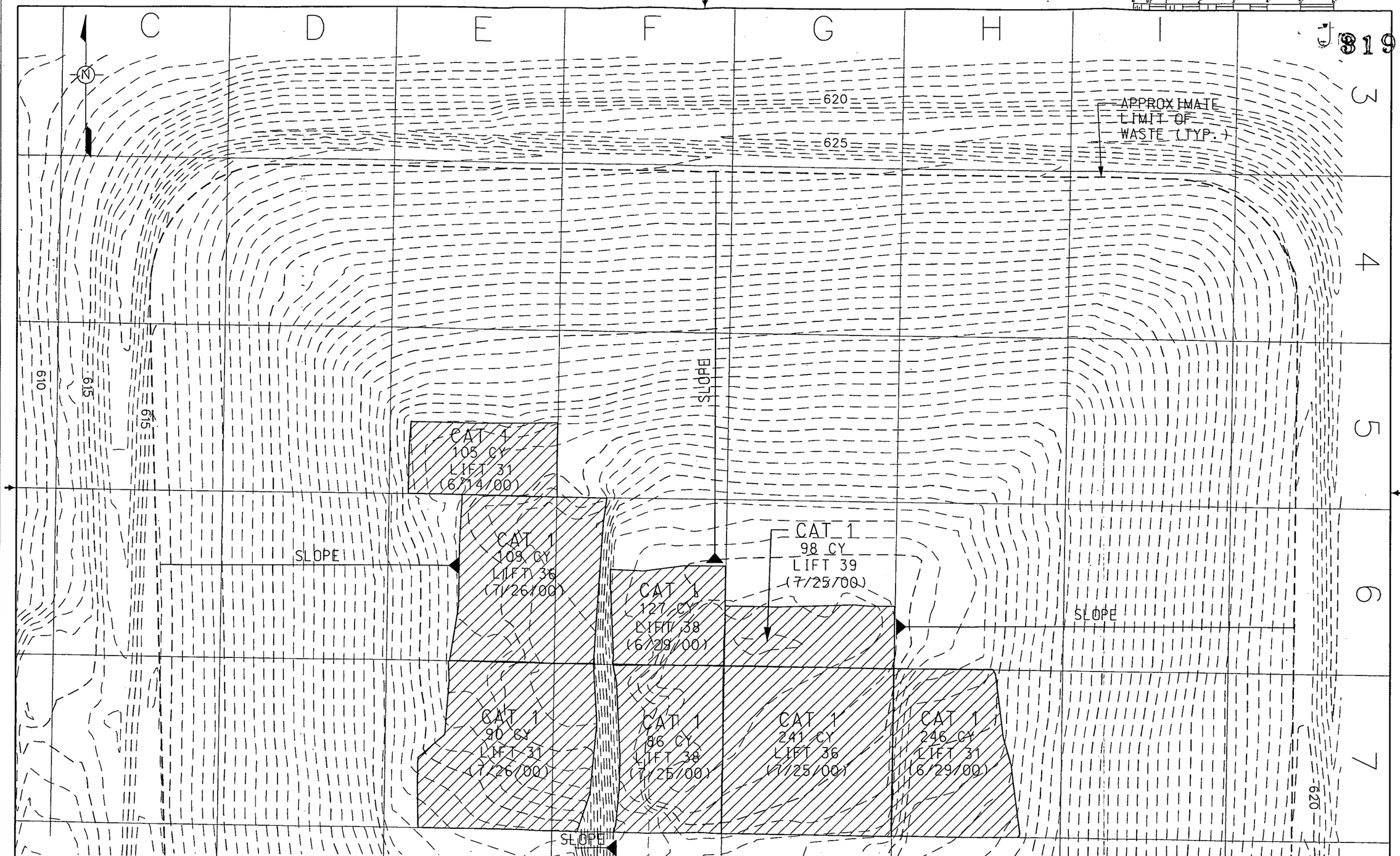
000031


Total Soil and Debris Placement (icy)
Actual Total Impacted Material Placement
Projected Impacted Material Placement
In-place cubic yards (icy)
130000
120000
110000
100000
90000
80000
70000
60000
50000
40000
30000
20000
1-May
8-May
15-May
22-May
29-May
5-Jun
12-Jun
19-Jun
26-Jun
3-Jul
10-Jul
17-Jul
24-Jul
31-Jul
May - June - July
36400
35229
50640
47980
58900
53139
66490
60445
72160
68350
79160
78540
86160
83647
92460
87988
98460
94049
102360
94049
106160
97499
113760
104418
119410
108626
127010
114365

Total Soil and Debris Placement (bcy)



000032



CELL 1 CURRENT SURFACE PLAN AS OF 7/28/00

000033

NO.	REVISIONS	DATE	DWN. BY	APPD.	NO.	REVISIONS	DATE	DWN. BY	APPD.	REF. DWG. NO.

NOTE: FLUOR FERNALD CADD DRAWING, DO NOT REVISE MANUALLY.

CONFIGURATION MANAGEMENT DRAWING

SYSTEMS, STRUCTURES OR COMPONENTS DEPICTED ON THIS DRAWING ARE UNDER CONFIGURATION MANAGEMENT CONTROL. SEE NOTES.

COGNIZANT ENGINEER DATE

APPROVALS

CIVIL & STR.		SAFETY ENG.	
ELECTRICAL		MAINTENANCE	
ENGINEER		FIRE PROTECT	
INSTRUMENT		WASTE MANAGE	
MECHANICAL		SECURITY	
		PROJECTS	
CHECKED			
APPROVED			

Fernald Environmental Management Project

FLUOR FERNALD, INC.

U.S. DEPARTMENT OF ENERGY

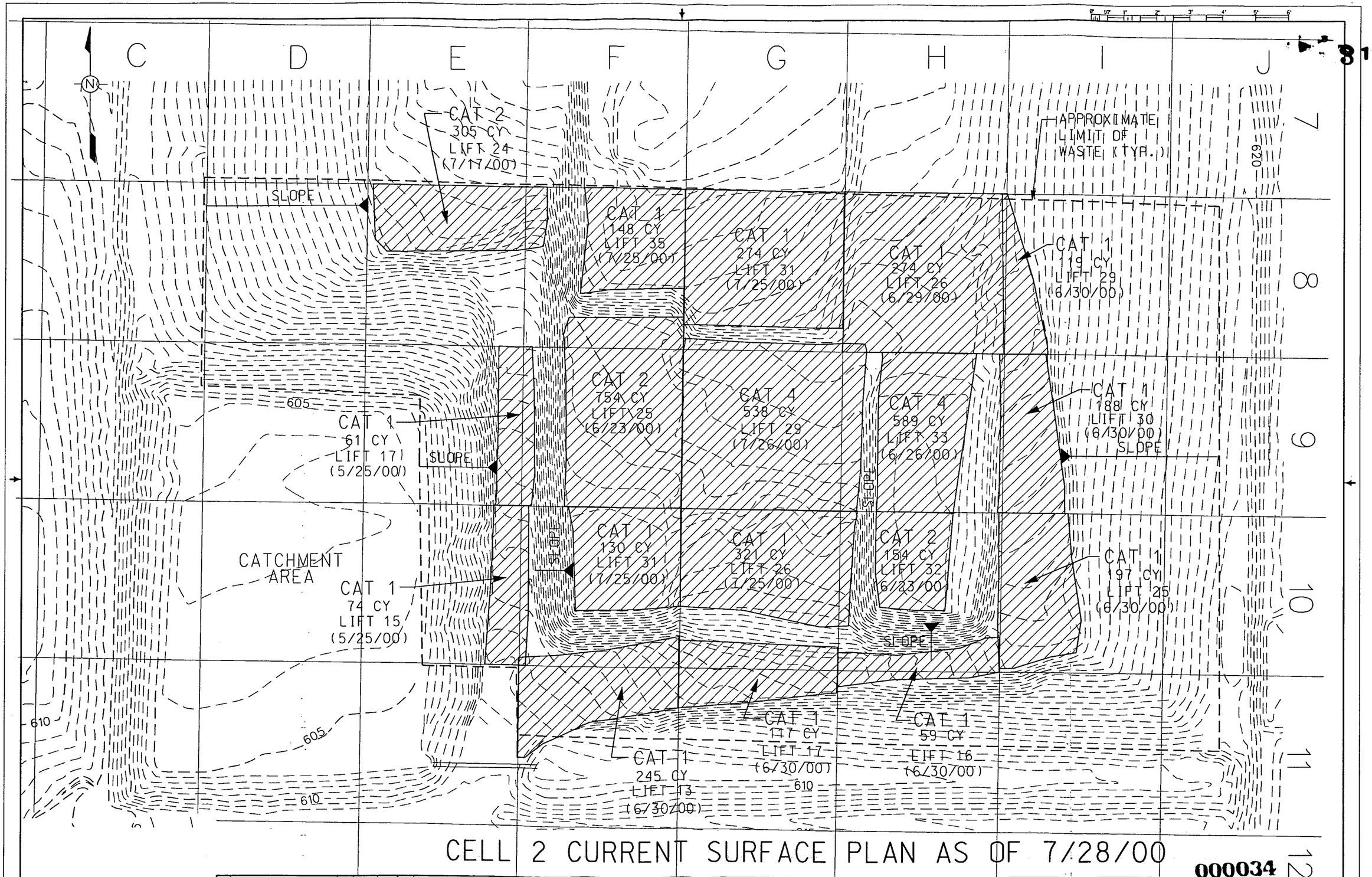
CELL 1
TOP LIFT PLAN
CATEGORY PLACEMENT

DATE 8/2/00
DRAWN DRF

FILE NAME: 1jly00.dgn

FFS.DGN 3/22/00

3192



CELL 2 CURRENT SURFACE PLAN AS OF 7/28/00

000034

LEGEND:

SURVEYED AREAS

NO.	REVISIONS	DATE	DWN. BY	APPD.	NO.	REVISIONS	DATE	DWN. BY	APPD.	REF. DWG. NO.

NOTE:
FLUOR FERNALD CADD DRAWING. DO NOT REVISE MANUALLY.

CONFIGURATION MANAGEMENT DRAWING
YES / NO
EXISTING REFLECTS FIELD OR CONCURRENT CHANGES PER CONFIGURATION MANAGEMENT CONTROL. SEE NOTES.
COGNIZANT ENGINEER DATE

APPROVALS

CIVIL & STR.		SAFETY ENG.	
ELECTRICAL		MAINTENANCE	
ENGINEER		FIRE PROTECT.	
INSTRUMENT		WASTE MANAGE.	
MECHANICAL		SECURITY	
		PROJECTS	
CHECKED			
APPROVED			

Fernald Environmental Management Project

FLUOR FERNALD, INC.

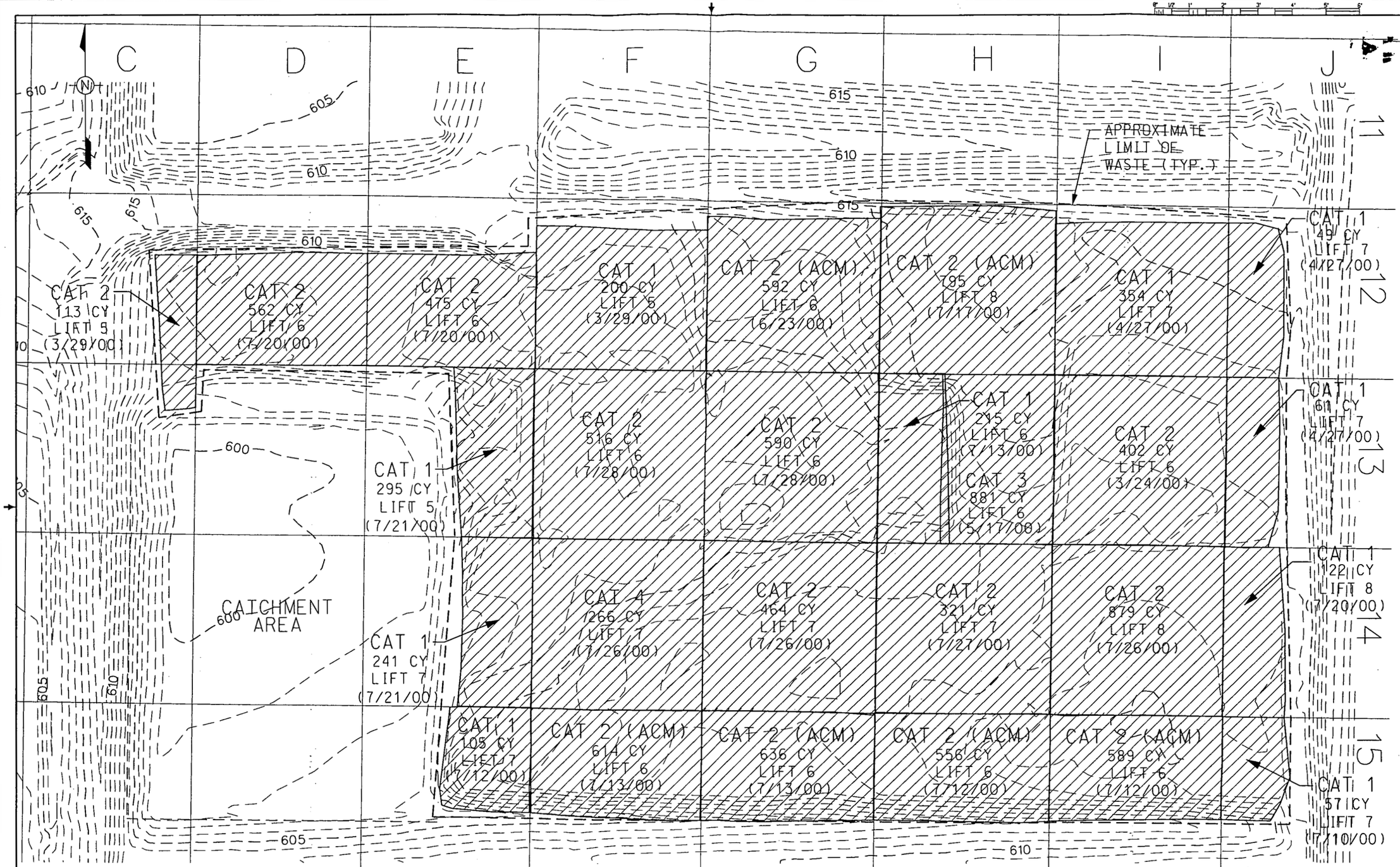
U.S. DEPARTMENT OF ENERGY

CELL 2
TOP LIFT PLAN
CATEGORY PLACEMENT

DATE 8/2/00
DRAWN DRF

FILE NAME: 2jly00.dgn

FFS.DGN 3/22/00



CELL 3 CURRENT SURFACE PLAN AS OF 7/28/00

000035

LEGEND:

SURVEYED AREAS

NO.	REVISIONS	DATE	DWN. BY	APPD.	NO.	REVISIONS	DATE	DWN. BY	APPD.	REF. DWG. NO.

NOTE: FLUOR FERNALD CADD DRAWING, DO NOT REVISE MANUALLY.

CONFIGURATION MANAGEMENT DRAWING — YES / NO

SYSTEMS, STRUCTURES OR COMPONENTS SHOWN ON THIS DRAWING ARE UNDER CONFIGURATION MANAGEMENT CONTROL. SEE NOTES.

COGNIZANT ENGINEER — DATE

APPROVALS				
CIVIL & STR.			SAFETY ENG.	
ELECTRICAL			MAINTENANCE	
ENGINEER			FIRE PROTECT.	
INSTRUMENT			WASTE MANAGE.	
MECHANICAL			SECURITY	
			PROJECTS	
CHECKED				
APPROVED				

Fernald Environmental Management Project

FLUOR FERNALD, INC.

U.S. DEPARTMENT OF ENERGY

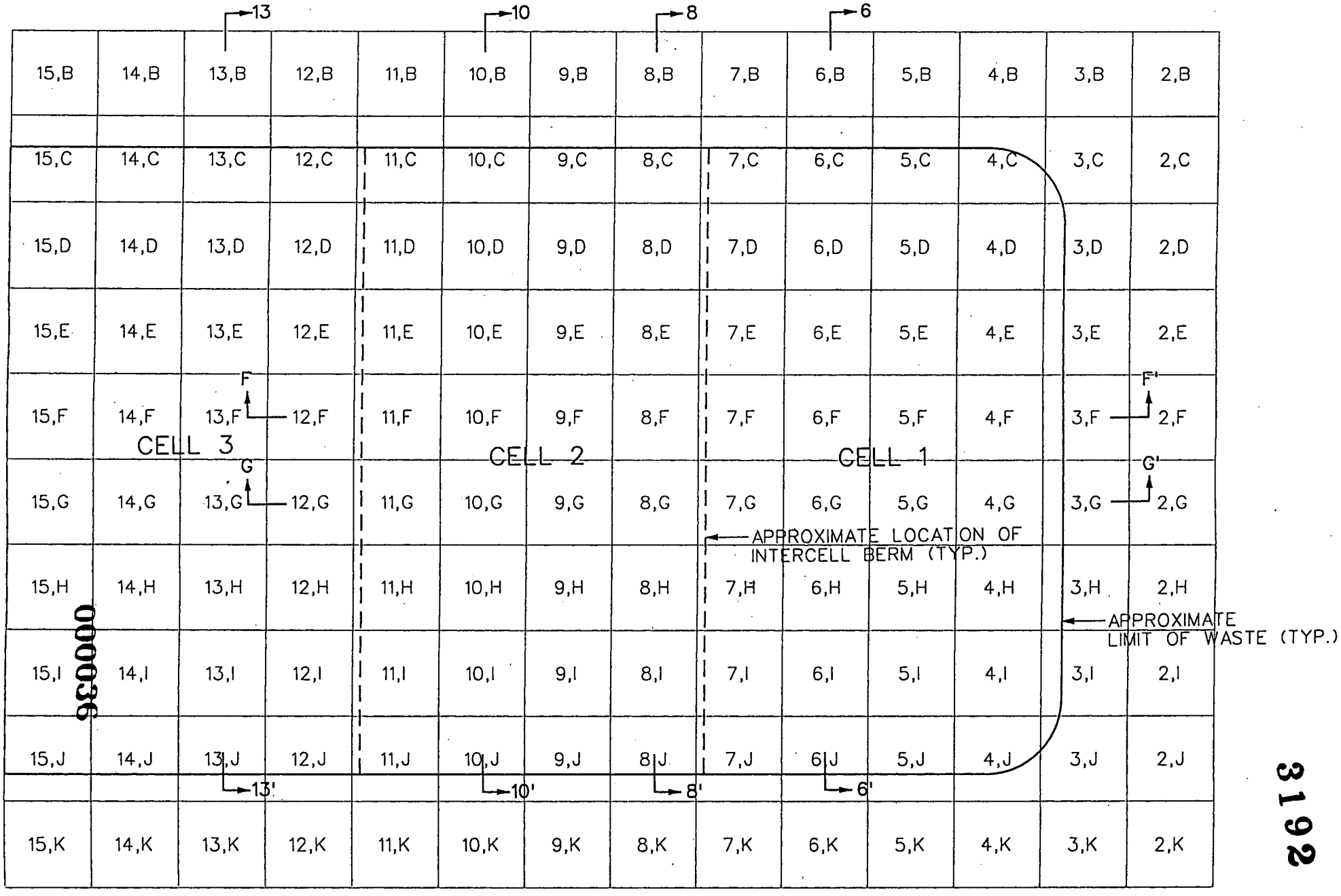
CELL 3
TOP LIFT PLAN
CATEGORY PLACEMENT

DATE 8/2/00
DRAWN DRF

FFS.DGN 3/22/00

FILE NAME: 3jly00.dgn

OSDF GRID KEY PLAN



000036

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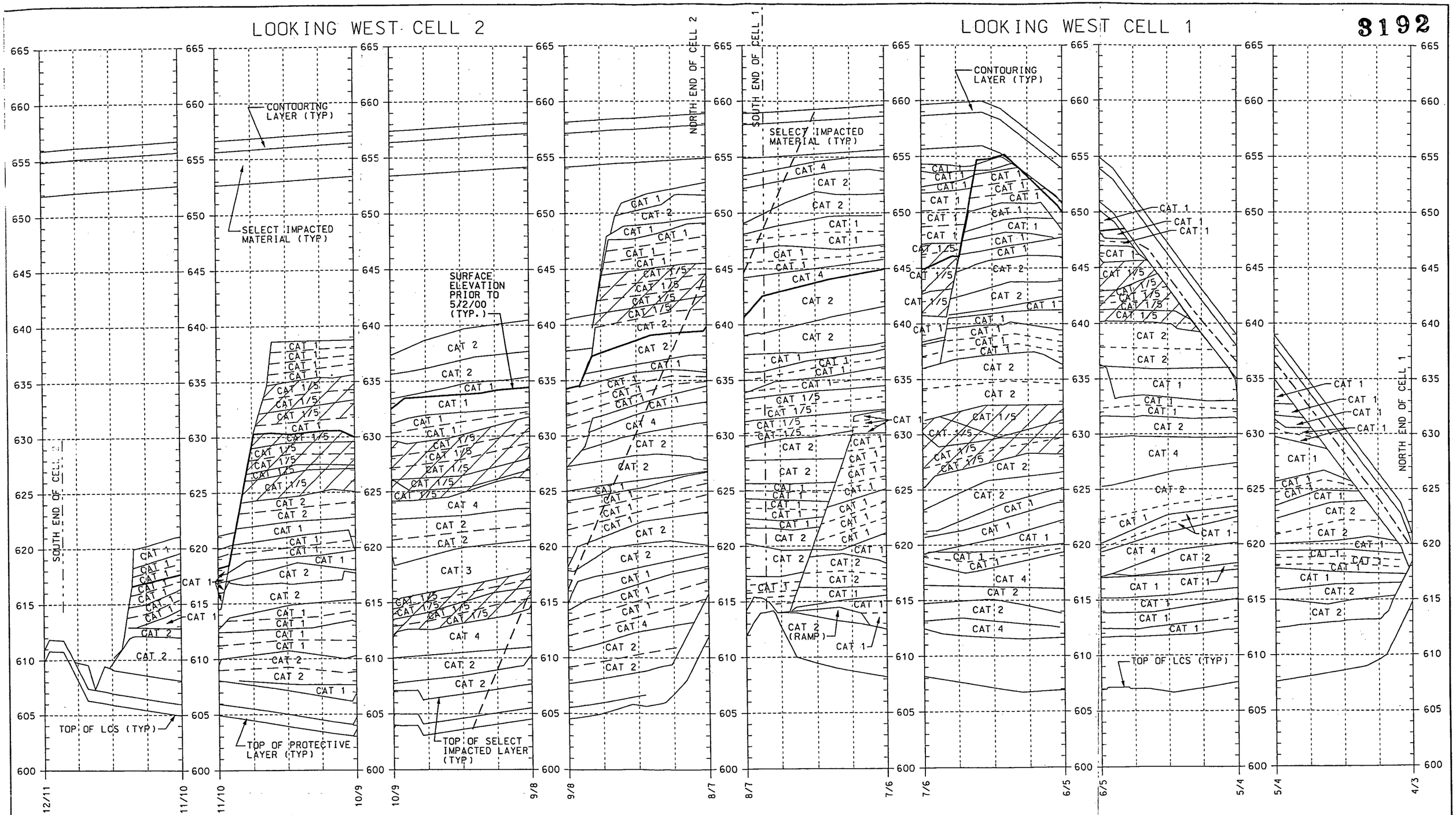
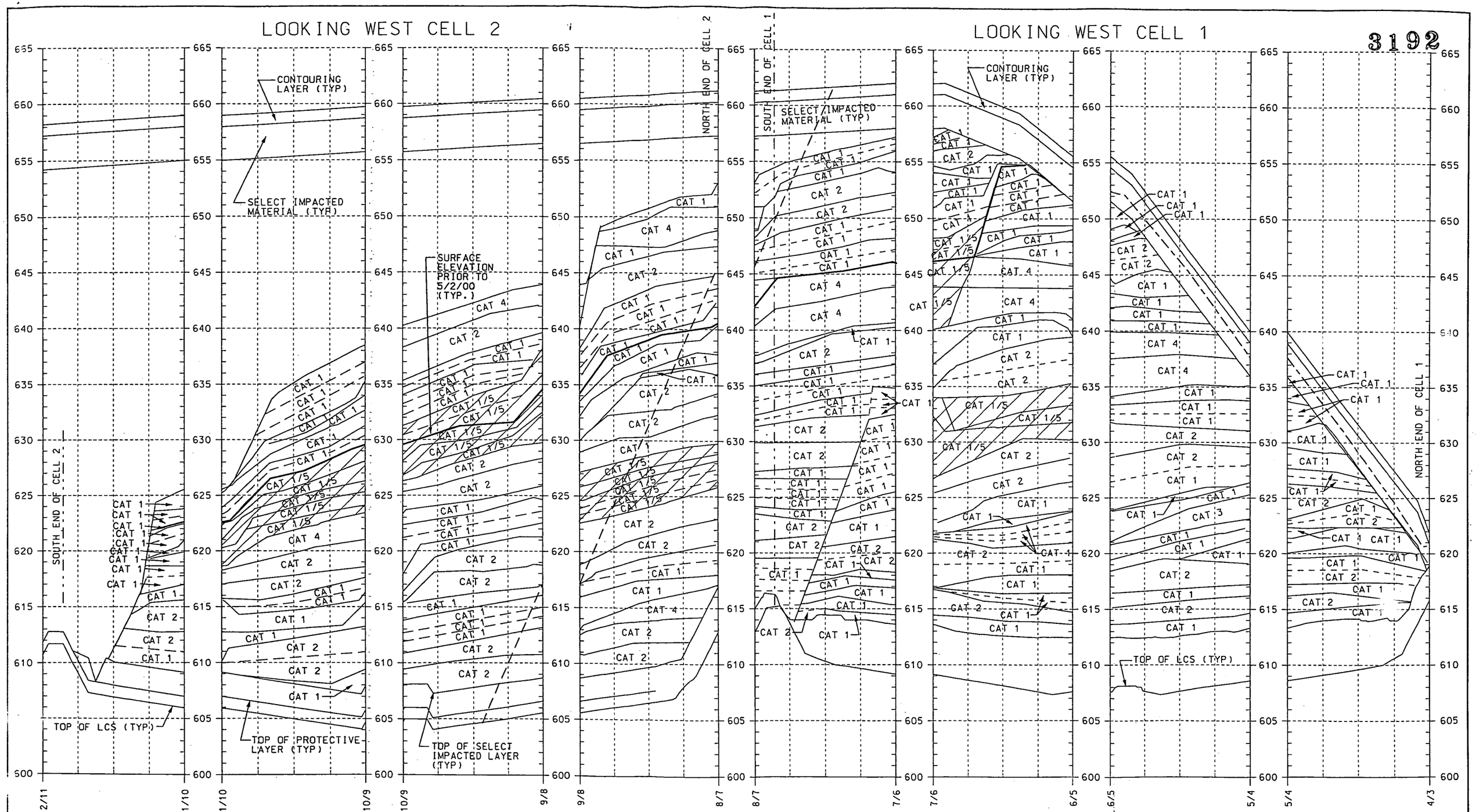


SECTION F-F'

REVISED 7/31/00 (7/28/00 SURVEY)

jlysect00.dgn



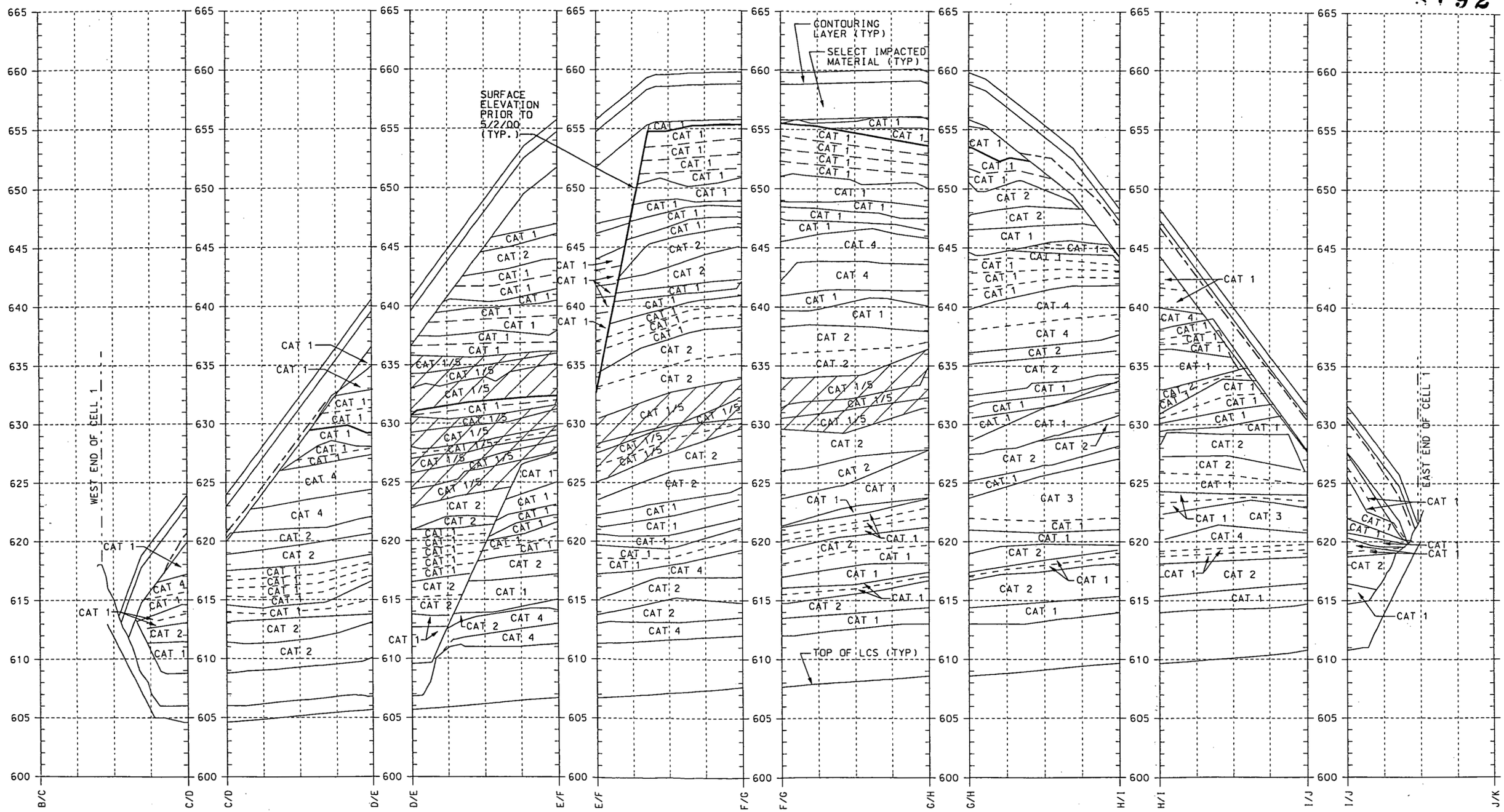
SECTION G-G'

REVISED 7/31/00 (7/28/00 SURVEY)

000038

jlysect00.dgn

LOOKING NORTH CELL 1

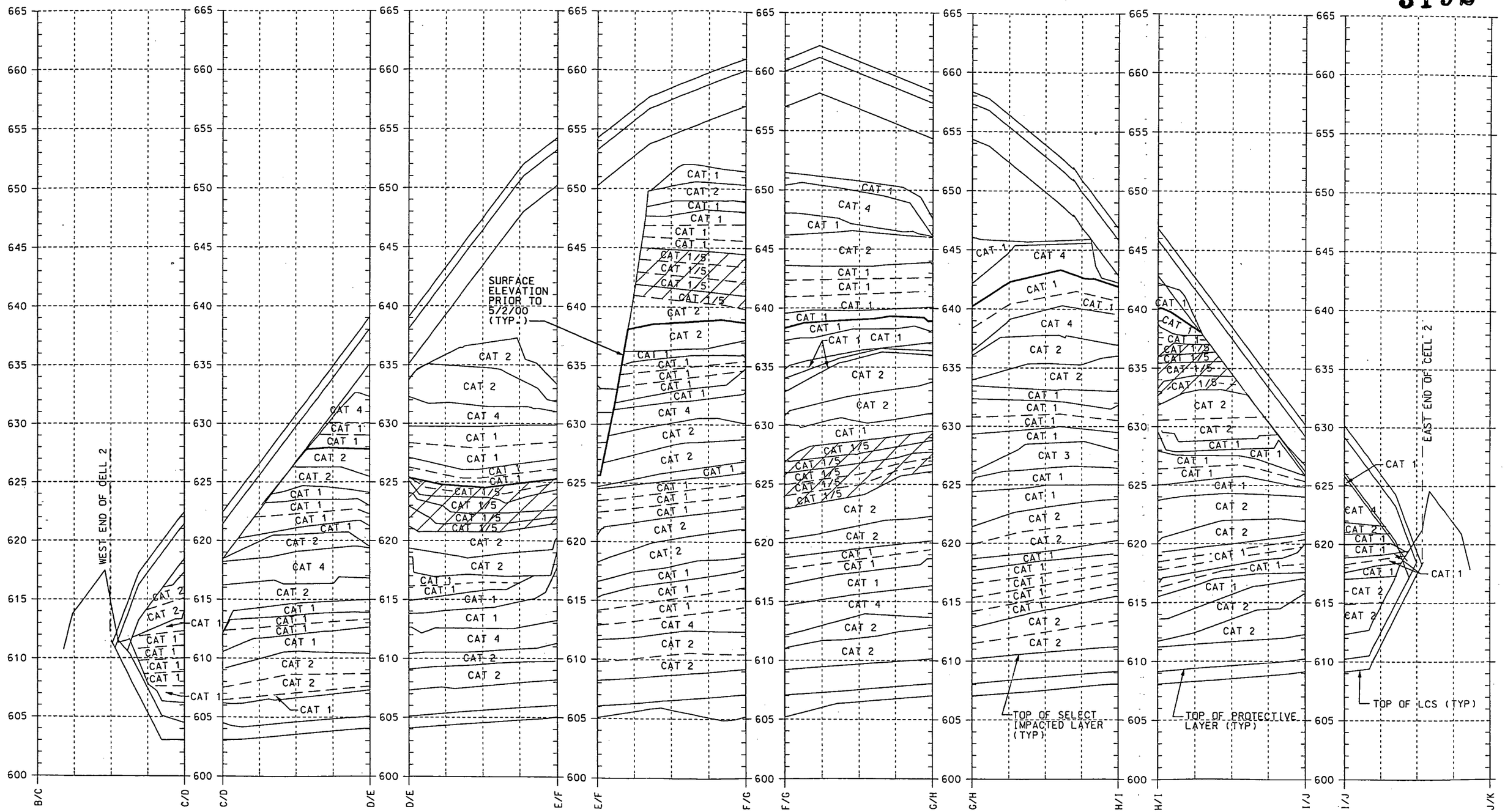


SECTION 6-6'

REVISED 7/31/00 (7/28/00 SURVEY)

jlysect00.dgn

LOOKING NORTH CELL 2

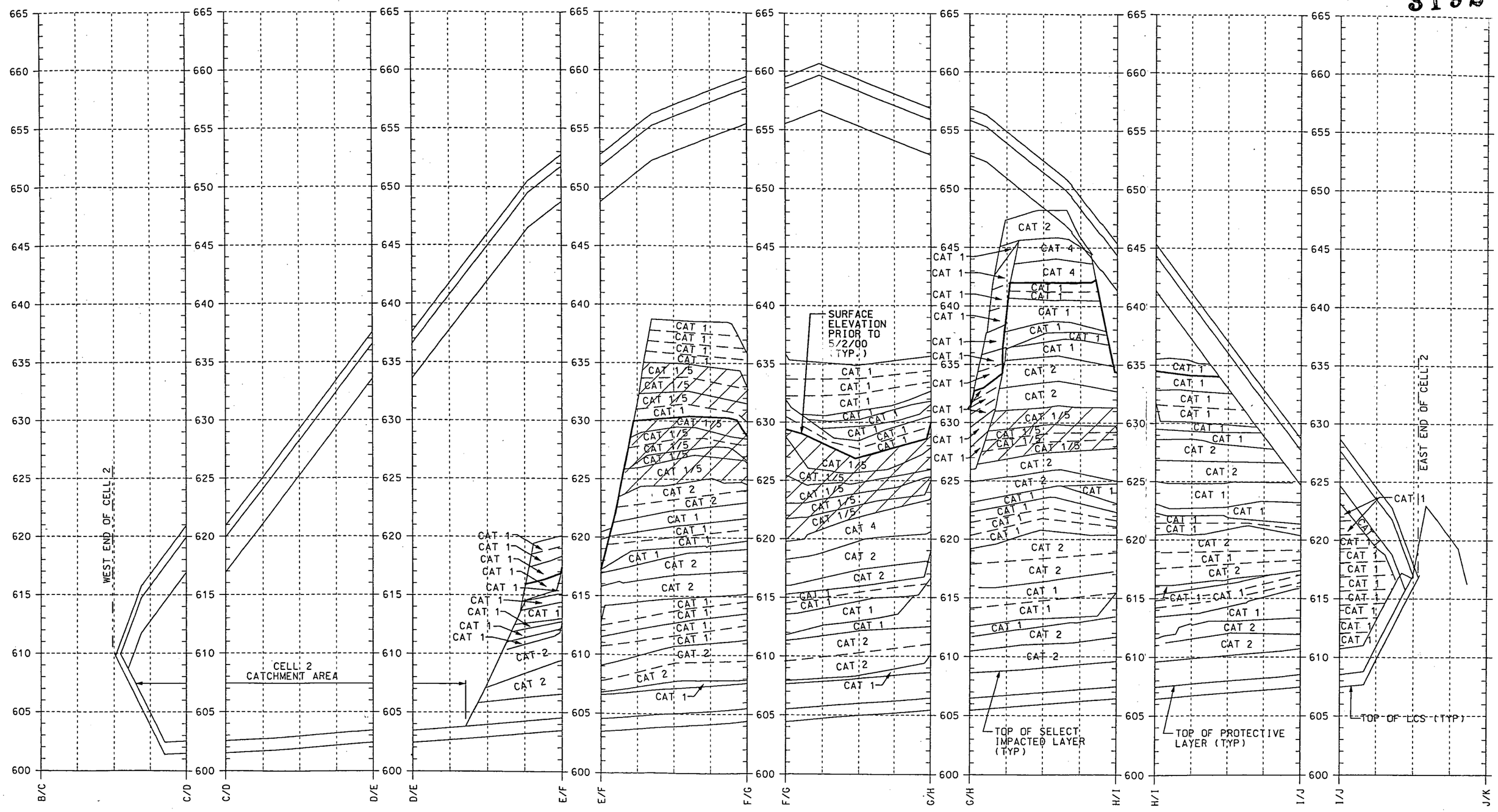


SECTION 8-8'

REVISED 7/31/00 (7/28/00 SURVEY)

jlysect00.dgn

LOOKING NORTH CELL 2

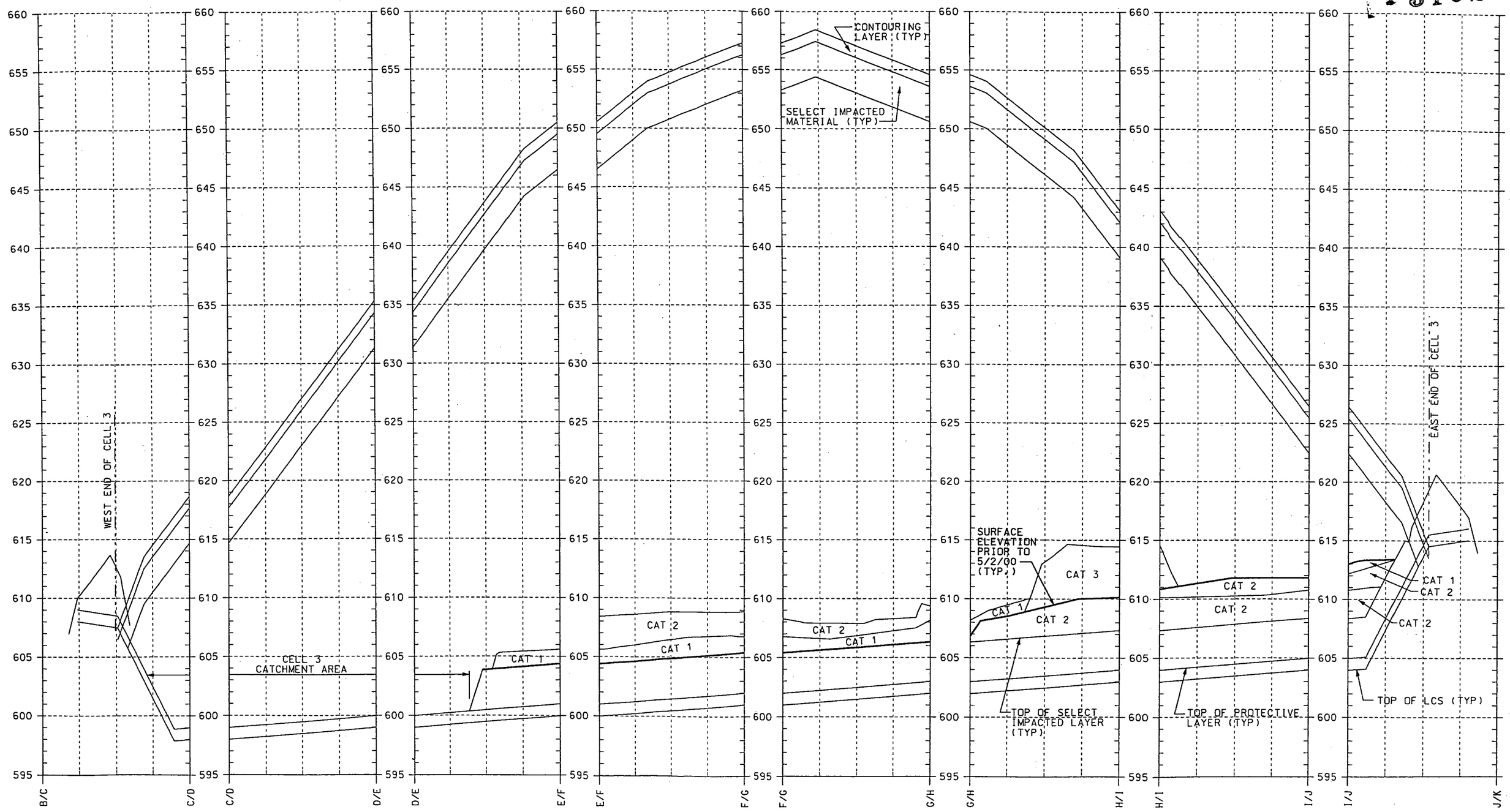


SECTION 10-10'

REVISED 7/31/00 (7/28/00 SURVEY)

jlysect00.dgn

LOOKING NORTH CELL 3



SECTION 13-13'

REVISED 7/31/00 (7/28/00 SURVEY)

jlysect00.dgn