

19—NATURAL RESOURCES

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
19.1—Veins and mineralized areas; mineral resource areas; metamorphic facies boundary				
19.1.1	Vein, veinlet, or mineralized stringer—Identity and existence certain, location accurate		lineweight .25 mm color 100% red → 8.0 mm ← H-8	May also be shown in black or other colors.
19.1.2	Vein, veinlet, or mineralized stringer—Identity or existence questionable, location accurate		dot diameter .75 mm; spacing 4.5 mm	
19.1.3	Vein, veinlet, or mineralized stringer—Identity and existence certain, location approximate		3.625 mm	
19.1.4	Vein, veinlet, or mineralized stringer—Identity or existence questionable, location approximate		.75 mm .75 mm	
19.1.5	Vein, veinlet, or mineralized stringer—Identity and existence certain, location concealed		.5 mm .75 mm	
19.1.6	Vein, veinlet, or mineralized stringer—Identity or existence questionable, location concealed		.75 mm .75 mm	
19.1.7	Vein, veinlet, or mineralized stringer—Showing type of mineral occurrence		Cu ← H-8 (100% black)	
19.1.8	Inclined vein, veinlet, or mineralized stringer (1st option)—Showing dip value and direction		tick length 1.75 mm; lineweight .2 mm tick color 100% black 35 ← HI-6 (100% black)	Place tick, arrow, or other line-symbol decoration where observation was made. Add arrowhead or '90' to ticks showing dip if necessary for clarity.
19.1.9	Inclined vein, veinlet, or mineralized stringer (2nd option)—Showing dip value and direction		tick length 1.375 mm; lineweight .2 mm 15 ← .875 mm 30°	
19.1.10	Vertical or near-vertical vein, veinlet, or mineralized stringer (1st option)		tick length 2.5 mm; lineweight .2 mm	
19.1.11	Vertical or near-vertical vein, veinlet, or mineralized stringer (2nd option)		90 ← HI-6 (100% black)	
19.1.12	Small, minor inclined vein, veinlet, or mineralized stringer—Showing strike and dip		HI-6 (100% black) 70 lineweight .25 mm; line color 100% red 1.25 mm 5.5 mm	May also be shown in black or other colors.
19.1.13	Small, minor vertical or near-vertical vein, veinlet, or mineralized stringer—Showing strike		2.5 mm	
19.1.14	Zone of mineralized or altered rock (1st option)		pattern 405-R (at 45°)	Add labels to show specific types of alteration. May be used alone or may overprint other mapped units. May also be shown in black or other colors.
19.1.15	Zone of mineralized or altered rock (2nd option)		pattern 405-R in 50% red (at 45°)	
19.1.16	Zone of mineralized or altered rock, showing high level of mineralization		pattern 119-R	
19.1.17	Zone of mineralized or altered rock, showing low level of mineralization		pattern 117-R	
19.1.18	Area of identified resources		lineweight .5 mm color 100% red	Usually reserved for use on special-purpose maps, not on general-purpose geologic maps. Generally shown in red, but may also be shown in black or other colors.
19.1.19	Area of high mineral resource potential		lineweight .3 mm line and text color 100% red H-12 pattern 427-R in 50% red	
19.1.20	Area of moderate mineral resource potential		lineweight .3 mm H-12 pattern 229-R (at 45°) in 50% red	
19.1.21	Area of low mineral resource potential		lineweight .2 mm H-10	
19.1.22	Area considered to have mineral resource potential but not evaluated, mostly because of inadequate data		lineweight .2 mm H-10 dash 1.75 mm; space .5 mm	
19.1.23	Metamorphic facies boundary—Showing approximate boundary between diagnostic mineral assemblages		H-8 Greenschist dot diameter .5 mm; spacing .5 mm line and text color 100% red Amphibolite	May also be shown in black or other colors.

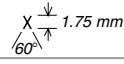


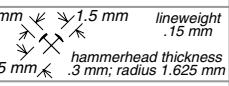


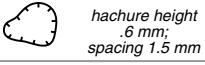

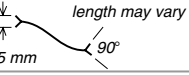

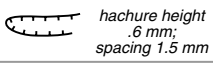
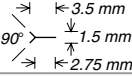
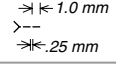
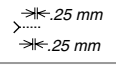
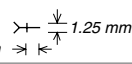
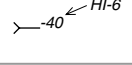

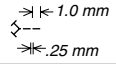

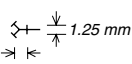
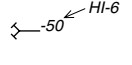
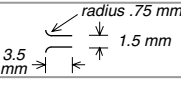
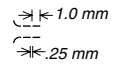
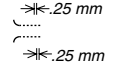
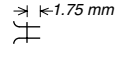
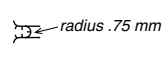
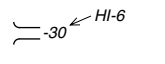
*For more information, see general guidelines on pages A-i to A-v.

19—NATURAL RESOURCES (continued)

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
19.2—Areas of extensively disturbed ground; surface workings; subsurface workings projected to surface				
19.2.1	Graded area—Extensive amount of mapped geologic unit has been removed		lineweight .2 mm line color 100% red pattern 226-R (at 45°)	Patterns should overlay other mapped units. Generally shown in black or red, but may also be shown in brown or other colors.
19.2.2	Strip mine (1st option)		lineweight .3 mm lineweight .15 mm pattern 226-K (at 45°)	
19.2.3	Strip mine (2nd option)		pattern 419-R in 50% red	
19.2.4	Artificial fill—Earth materials		lineweight .15 mm H-8 20% black	Show as separately mapped units. Generally shown in black or red, but may also be shown in other colors.
19.2.5	Artificial fill—Human-generated refuse (landfill)		lineweight .15 mm H-8 pattern 226-R (at 45°)	
19.2.6	Tailings		lineweights .125 mm draft as shown	Symbols should overlay other mapped units. Generally shown in red or black, but may also be shown in brown or other colors.
19.2.7	Mine dump (1st option)		all lineweights .125 mm dash length and spacing may vary draft as shown	
19.2.8	Mine dump (2nd option)		all lineweights .125 mm dash length and spacing may vary draft as shown	
19.2.9	Mine dump bench		.75 mm 2.5 mm all lineweights .125 mm	
19.2.10	Subsurface workings, projected to surface (1st option)		color 100% red lineweights .2 mm spacing may vary	Different symbols may be used to show different levels of workings. Symbols should overlay other mapped units. Generally shown in red, but may also be shown in black or other colors.
19.2.11	Subsurface workings, projected to surface (2nd option)		dash 3.0 mm; spacing .5 mm	
19.2.12	Subsurface workings, projected to surface (3rd option)		dash 1.5 mm; spacing .5 mm	
19.2.13	Subsurface workings, projected to surface (4th option)		dash .5 mm; spacing .5 mm	
19.2.14	Subsurface workings, projected to surface (5th option)		long dash 2.5 mm; short dashes .5 mm; spacing .5 mm	
19.2.15	Subsurface workings, projected to surface (6th option)		long dash 4.0 mm; short dash .5 mm; spacing .5 mm	

*For more information, see general guidelines on pages A-i to A-v.

19—NATURAL RESOURCES (continued)

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
19.3—Mining and mineral exploration (at surface)				
19.3.1	Prospect (pit or small open cut)	X	lineweight .2 mm 	
19.3.2	Sand, gravel, clay, or placer pit	⊗	3.125 mm all lineweights .15 mm 	
19.3.3	Abandoned sand, gravel, clay, or placer pit	⊗	1.5 mm all lineweights .15 mm 	
19.3.4	Open pit, quarry, or glory hole	⊗	pick thickness .25 mm; radius 1.625 mm 1.5 mm 1.5 mm 3.125 mm lineweight .15 mm hammerhead thickness .3 mm; radius 1.625 mm 	
19.3.5	Abandoned open pit, quarry, or glory hole	⊗	all lineweights .15 mm 	
19.3.6	Open pit or quarry (mapped to scale)		all lineweights .25 mm  hachure height .6 mm; spacing 1.5 mm	
19.3.7	Trench (generalized trace)		1.5 mm length may vary all lineweights .25 mm 	
19.3.8	Trench (drawn to scale)		all lineweights .25 mm  hachure height .6 mm; spacing 1.5 mm	
19.3.9	Adit or tunnel entrance (1st option)	Y	all lineweights .175 mm 	Long line points in direction of adit or tunnel entrance at surface.
19.3.10	Approximately located adit or tunnel entrance (1st option)	Y--		Map position of adit or tunnel entrance is at intersection of long line and two short lines.
19.3.11	Destroyed adit or tunnel entrance (1st option)	Y...		
19.3.12	Abandoned or inaccessible adit or tunnel entrance (1st option)	Y+	all lineweights .175 mm 	
19.3.13	Adit or tunnel entrance (1st option)—Showing angle of inclination (negative value indicates downward slope)	Y-40		Angle of inclination may be added to any adit or tunnel entrance symbol.
19.3.14	Adit or tunnel entrance (2nd option)	Y	all lineweights .175 mm 	Long line points in direction of adit or tunnel entrance at surface.
19.3.15	Approximately located adit or tunnel entrance (2nd option)	Y--		Map position of adit or tunnel entrance is at intersection of long line and two short lines.
19.3.16	Destroyed adit or tunnel entrance (2nd option)	Y...		
19.3.17	Abandoned or inaccessible adit or tunnel entrance (2nd option)	Y+	all lineweights .175 mm 	
19.3.18	Adit or tunnel entrance (2nd option)—Showing angle of inclination (negative value indicates downward slope)	Y-50		Angle of inclination may be added to any adit or tunnel entrance symbol.
19.3.19	Portal		all lineweights .175 mm 	Long lines point in direction of portal entry at surface.
19.3.20	Approximately located portal			Map position of portal entry is between the two lines, at the position where the short curved lines intersect the long lines.
19.3.21	Destroyed portal			
19.3.22	Abandoned or inaccessible portal		all lineweights .175 mm 	
19.3.23	Portal and open cut		all lineweights .175 mm tick length .5 mm 	Open cut may be added to any portal symbol.
19.3.24	Portal—Showing angle of inclination (negative value indicates downward slope)	-30		Angle of inclination may be added to any portal symbol.

19—NATURAL RESOURCES (continued)

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
19.3—Mining and mineral exploration (at surface) (continued)				
19.3.25	Drill hole for mineral exploration	○	<i>lineweight</i> .175 mm ○ <i>diameter</i> 1.5 mm	
19.3.26	Drill hole for mineral exploration—No geologic data available	○ ND	○ ND ← H-6	
19.3.27	Drill hole for mineral exploration—Showing name and number	○ PAHUTE 2	○ PAHUTE 2 ← H-7	
19.3.28	Drill hole for mineral exploration—Showing type (DDH, diamond drill hole)	DDH ○	HI-6 → DDH ○	
19.3.29	Drill hole for exploration of low-grade ore	φ	φ $\frac{\downarrow}{4.0 \text{ mm}}$ \uparrow	
19.3.30	Drill hole for exploration of high-grade ore	●	● $\frac{\downarrow}{4.0 \text{ mm}}$ \uparrow	
19.3.31	Inclined drill hole for mineral exploration—Showing location of collar (circle) and projected trace (dashed line) and bottom (T) of drill hole	○-----┴	<i>all lineweights</i> .175 mm ○-----┴ <i>length may vary</i> $\frac{\rightarrow}{1.0 \text{ mm}}$ $\frac{\downarrow}{1.5 \text{ mm}}$	Projected trace of drill hole, angle of inclination, surface altitude, and total depth may be added to any drill hole symbol.
19.3.32	Inclined drill hole for mineral exploration—Showing angle of inclination (negative value indicates downward slope)	○-----┴ ⁻⁶⁵	○-----┴ ⁻⁶⁵ ← HI-6	
19.3.33	Inclined drill hole for mineral exploration—Showing surface altitude of collar (in meters)	2500 ○-----┴	HI-6 → 2500 ○-----┴	
19.3.34	Inclined drill hole for mineral exploration—Showing total depth of drill hole (in meters)	○-----┴ TD 1000	○-----┴ TD 1000 ← HI-6	
19.3.35	Vertical mine shaft, as shown on smaller scale or general-purpose maps	■	<i>lineweight</i> .175 mm ■ 1.5 mm $\frac{\downarrow}{1.5 \text{ mm}}$ $\frac{\rightarrow}{1.5 \text{ mm}}$	
19.3.36	Multiple vertical mine shafts, as shown on smaller scale or general-purpose maps	■■■	■■■	
19.3.37	Abandoned or inaccessible vertical mine shaft, as shown on smaller scale or general-purpose maps	■ ^A	■ ^A ← H-7	
19.3.38	Inclined mine shaft, as shown on smaller scale or general-purpose maps—Showing direction of inclination	┴	┴ $\frac{\downarrow}{1.0 \text{ mm}}$ \uparrow	
19.3.39	Inclined mine shaft, as shown on smaller scale or general-purpose maps—Showing angle of inclination (negative value indicates downward slope)	┴ ₂₅	┴ ₂₅ ← HI-6	

*For more information, see general guidelines on pages A-i to A-v.

19—NATURAL RESOURCES (continued)

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
19.4—Mines and subsurface workings				
19.4.1	Vertical mine shaft at surface (drawn to scale), as shown on subsurface exploration maps		size may vary lineweight .175 mm	
19.4.2	Inclined mine shaft at surface (drawn to scale), as shown on subsurface exploration maps—Showing direction of inclination		all lineweights .175 mm lengths may vary	
19.4.3	Inclined mine shaft at surface (drawn to scale), as shown on subsurface exploration maps—Showing angle of inclination (negative value indicates downward slope)		-30 ← HI-6	
19.4.4	Mine shaft, above and below level (drawn to scale), as shown on subsurface exploration maps		size may vary all lineweights .175 mm	
19.4.5	Bottom of mine shaft (drawn to scale), as shown on subsurface exploration maps		size may vary all lineweights .175 mm	
19.4.6	Winze or head of raise (drawn to scale), as shown on subsurface exploration maps		size may vary all lineweights .175 mm	
19.4.7	Raise or winze extending through level (drawn to scale), as shown on subsurface exploration maps		size may vary all lineweights .175 mm	
19.4.8	Raise or foot of winze (drawn to scale), as shown on subsurface exploration maps		size may vary all lineweights .175 mm	
19.4.9	Crosscut tunnel or intersection of workings (drawn to scale), as shown on subsurface exploration maps		radius 1.25 mm lineweight .175 mm	size may vary
19.4.10	Workings (drawn to scale), as shown on subsurface exploration maps		spacing may vary lineweights .175 mm	
19.4.11	Caved or otherwise inaccessible workings (drawn to scale), as shown on subsurface exploration maps		all lineweights .175 mm length of crossbar may vary dash 1.5 mm; spacing .5 mm	spacing may vary
19.4.12	Inclined workings, as shown on subsurface exploration maps (drawn to scale)—Chevrons point down-slope (multiple chevrons indicate steeper slope)		all lineweights .175 mm spacing may vary 90°	
19.4.13	Ore chute (drawn to scale), as shown on subsurface exploration maps		1.5 mm spacing may vary all lineweights .15 mm	
19.4.14	Lagging or cribbing along drift (drawn to scale), as shown on subsurface exploration maps		all lineweights .15 mm spacing may vary circle diameter .75 mm; spacing .75 mm	.55 mm
19.4.15	Elevation of roof or back, as shown on subsurface exploration maps		1.0 mm 60° 2801' ← HI-6	all lineweights .15 mm
19.4.16	Elevation of floor or sill, as shown on subsurface exploration maps		1.0 mm HI-6 → 2809' 60°	
19.4.17	Stoped area (drawn to scale), as shown on subsurface exploration maps (section view)		all lineweights .15 mm dash 1.5 mm; spacing .5 mm	
19.4.18	Inferred stoped area (drawn to scale), as shown on subsurface exploration maps (section view)		pattern 226-K (at 45°) dash .3 mm; spacing .3 mm	

*For more information, see general guidelines on pages A-i to A-v.

19—NATURAL RESOURCES (continued)

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
19.5—Oil and gas fields; wells drilled for hydrocarbon exploration or exploitation				
19.5.1	Oil field—Extent defined		lineweight .2 mm fill color 50% green line color 100% green	Patterned areas (extent defined) should be shown as separately mapped units. Outlined areas (extent not yet defined) should overlay other mapped units. Generally shown in red and (or) green, but may also be shown in other colors or patterns.
19.5.2	Oil field—Extent not yet defined		lineweight .2 mm dash .5 mm; spacing .5 mm line color 50% green	
19.5.3	Gas field—Extent defined		lineweight .2 mm fill color 50% red line color 100% red	
19.5.4	Gas field—Extent not yet defined		lineweight .2 mm dash 2.0 mm; spacing .5 mm line color 100% red	
19.5.5	Oil and gas field—Extent defined		lineweight .2 mm pattern 426 (at 45°)	
19.5.6	Oil and gas field—Extent not yet defined		lineweight .2 mm long dash 2.0 mm; short dash .5 mm; space .5 mm	
19.5.7	Core (nonspecific depth)		lineweight .2 mm dot diameter .5 mm 1.75 mm	May also be shown in other colors.
19.5.8	Shallow core			Use if both shallow and deep cores are shown on map.
19.5.9	Deep core		all lineweights .2 mm circle diameter 2.75 mm	May also be shown in other colors.
19.5.10	Drilling well or well location for hydrocarbon exploration or exploitation		lineweight .2 mm diameter 1.5 mm	Name, number, and total depth may be added to any type of well symbol. May also be shown in green (oil), red (gas), or other colors.
19.5.11	Drill hole for hydrocarbon exploration or exploitation—No data available			
19.5.12	Drill hole for hydrocarbon exploration or exploitation—Showing name and number			
19.5.13	Drill hole for hydrocarbon exploration or exploitation—Showing total depth (in meters)			
19.5.14	Inclined drill hole for hydrocarbon exploration or exploitation—Showing location of collar (circle) and projected trace (dashed line) and bottom (T) of drill hole		all lineweights .2 mm length of trace may vary 1.0 mm 1.5 mm 5 mm	Projected trace of drill hole, angle of inclination, surface altitude, and total depth may be added to any type of well symbol.
19.5.15	Inclined drill hole for hydrocarbon exploration or exploitation—Showing angle of inclination			
19.5.16	Inclined drill hole for hydrocarbon exploration or exploitation—Showing surface altitude of collar (in meters)			
19.5.17	Inclined drill hole for hydrocarbon exploration or exploitation—Showing total depth of drill hole (in meters)			May also be shown in green (oil), red (gas), or other colors.
19.5.18	Multiple wells drilled from single platform—Showing location of collar (open circle) on platform. Types of wells indicated at drill hole bottoms			Any type of well symbol may be shown at bottoms of drill holes.

*For more information, see general guidelines on pages A-i to A-v.

19—NATURAL RESOURCES (continued)

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
19.5—Oil and gas fields; wells drilled for hydrocarbon exploration or exploitation (continued)				
19.5.19	Dry hole (nonspecific depth)		all lineweights .2 mm 	May also be shown in other colors.
19.5.20	Dry hole—Showing map unit at surface (Km) and at bottom of hole (Kd). Also showing altitude at surface and total depth of hole (in meters)		all lineweights .2 mm 	
19.5.21	Shallow dry hole			Use if both shallow and deep dry holes are shown on map.
19.5.22	Deep dry hole		all lineweights .2 mm 	May also be shown in other colors.
19.5.23	Junked hole (nonspecific depth)		all lineweights .2 mm 	May also be shown in other colors.
19.5.24	Shallow junked hole			Use if both shallow and deep junked holes are shown on map.
19.5.25	Deep junked hole		all lineweights .2 mm 	May also be shown in other colors.
19.5.26	Disposal well (nonspecific depth)		2.0 mm 	May also be shown in other colors.
19.5.27	Plugged and abandoned disposal well (nonspecific depth)		all lineweights .2 mm 	
19.5.28	Shallow disposal well			Use if both shallow and deep disposal wells are shown on map.
19.5.29	Plugged and abandoned shallow disposal well			May also be shown in other colors.
19.5.30	Deep disposal well		all lineweights .2 mm 	
19.5.31	Plugged and abandoned deep disposal well		all lineweights .2 mm 	
19.5.32	Salt-water disposal well (nonspecific depth)		2.0 mm 	May also be shown in other colors.
19.5.33	Plugged and abandoned salt-water disposal well (nonspecific depth)		all lineweights .2 mm 	
19.5.34	Shallow salt-water disposal well			Use if both shallow and deep salt-water disposal wells are shown on map.
19.5.35	Plugged and abandoned shallow salt-water disposal well			May also be shown in other colors.
19.5.36	Deep salt-water disposal well		all lineweights .2 mm 	
19.5.37	Plugged and abandoned deep salt-water disposal well		all lineweights .2 mm 	

*For more information, see general guidelines on pages A-i to A-v.

19—NATURAL RESOURCES (continued)

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
19.5—Oil and gas fields; wells drilled for hydrocarbon exploration or exploitation (continued)				
19.5.38	Oil seep		lineweight .2 mm diameter 1.5 mm	May also be shown in green or other colors.
19.5.39	Oil show		lineweight .2 mm diameter 1.5 mm	
19.5.40	Oil well (nonspecific depth)		diameter 1.5 mm	Use if both shallow and deep oil wells are shown on map.
19.5.41	Suspended oil well (nonspecific depth)		lineweight .2 mm 4.0 mm	
19.5.42	Plugged and abandoned oil well (nonspecific depth)		lineweight .2 mm 4.0 mm	
19.5.43	Shallow oil well			
19.5.44	Suspended shallow oil well			
19.5.45	Plugged and abandoned shallow oil well			
19.5.46	Deep oil well		lineweight .2 mm inner dot diameter 1.5 mm outer circle diameter 2.75 mm	
19.5.47	Suspended deep oil well		all lineweights .2 mm 4.0 mm	
19.5.48	Plugged and abandoned deep oil well		all lineweights .2 mm 4.0 mm	
19.5.49	Gas seep		all lineweights .2 mm 90° 90° 1.2 mm diameter 1.5 mm	
19.5.50	Gas show		all lineweights .2 mm diameter 1.5 mm	
19.5.51	Gas well (nonspecific depth)		all lineweights .2 mm diameter 1.5 mm	Use if both shallow and deep gas wells are shown on map.
19.5.52	Suspended gas well (nonspecific depth)		all lineweights .2 mm 4.0 mm	
19.5.53	Plugged and abandoned gas well (nonspecific depth)		all lineweights .2 mm 4.0 mm	
19.5.54	Shallow gas well			
19.5.55	Suspended shallow gas well			
19.5.56	Plugged and abandoned shallow gas well			
19.5.57	Deep gas well		inner circle diameter 1.5 mm; outer circle diameter 2.75 mm all lineweights .2 mm	
19.5.58	Suspended deep gas well		all lineweights .2 mm 4.0 mm	
19.5.59	Plugged and abandoned deep gas well		all lineweights .2 mm 4.0 mm	
19.5.60	Deep gas well, plugged back and producing shallow gas		all lineweights .2 mm 1.25 mm	

*For more information, see general guidelines on pages A-i to A-v.

19—NATURAL RESOURCES (continued)

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
19.5—Oil and gas fields; wells drilled for hydrocarbon exploration or exploitation (continued)				
19.5.61	Oil and gas seep		all lineweights .2 mm 90° 90° 1.2 mm .625 mm diameter 1.5 mm	May also be shown in other colors.
19.5.62	Oil and gas show		all lineweights .2 mm .625 mm diameter 1.5 mm	
19.5.63	Oil and gas well (nonspecific depth)		all lineweights .2 mm .625 mm	Use if both shallow and deep oil and gas wells are shown on map. May also be shown in other colors.
19.5.64	Suspended oil and gas well (nonspecific depth)		all lineweights .2 mm 4.0 mm	
19.5.65	Plugged and abandoned oil and gas well (nonspecific depth)		all lineweights .2 mm 4.0 mm	
19.5.66	Shallow oil and gas well			
19.5.67	Suspended shallow oil and gas well			
19.5.68	Plugged and abandoned shallow oil and gas well			
19.5.69	Deep oil and gas well		inner dot diameter 1.5 mm; outer circle diameter 2.75 mm all lineweights .2 mm .625 mm	
19.5.70	Suspended deep oil and gas well		all lineweights .2 mm 4.0 mm	
19.5.71	Plugged and abandoned deep oil and gas well		all lineweights .2 mm 4.0 mm	
19.5.72	Condensate show		lineweight .2 mm diameter 1.5 mm	May also be shown in other colors.
19.5.73	Condensate well (nonspecific depth)		lineweight .2 mm diameter 1.5 mm	
19.5.74	Suspended condensate well (nonspecific depth)		lineweight .2 mm 4.0 mm	
19.5.75	Plugged and abandoned condensate well (nonspecific depth)		lineweight .2 mm 4.0 mm	
19.5.76	Shallow condensate well			Use if both shallow and deep condensate wells are shown on map. May also be shown in other colors.
19.5.77	Suspended shallow condensate well			
19.5.78	Plugged and abandoned shallow condensate well			
19.5.79	Deep condensate well		all lineweights .2 mm inner dot diameter 1.5 mm outer circle diameter 2.75 mm	
19.5.80	Suspended deep condensate well		all lineweights .2 mm 4.0 mm	
19.5.81	Plugged and abandoned deep condensate well		all lineweights .2 mm 4.0 mm	

*For more information, see general guidelines on pages A-i to A-v.

19—NATURAL RESOURCES (continued)

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
19.5—Oil and gas fields; wells drilled for hydrocarbon exploration or exploitation (continued)				
19.5.82	Gas and condensate show		all lineweights .2 mm diameter 1.5 mm 	May also be shown in other colors.
19.5.83	Gas and condensate well (nonspecific depth)		all lineweights .2 mm diameter 1.5 mm 	
19.5.84	Suspended gas and condensate well (nonspecific depth)		all lineweights .2 mm 	
19.5.85	Plugged and abandoned gas and condensate well (nonspecific depth)		all lineweights .2 mm 	
19.5.86	Shallow gas and condensate well			Use if both shallow and deep gas and condensate wells are shown on map. May also be shown in other colors.
19.5.87	Suspended shallow gas and condensate well			
19.5.88	Plugged and abandoned shallow gas and condensate well			
19.5.89	Deep gas and condensate well		inner circle diameter 1.5 mm; outer circle diameter 2.75 mm all lineweights .2 mm 	
19.5.90	Suspended deep gas and condensate well		all lineweights .2 mm 	
19.5.91	Plugged and abandoned deep gas and condensate well		all lineweights .2 mm 	
19.5.92	Gas storage well (nonspecific depth)		1.75 mm 	May also be shown in other colors.
19.5.93	Plugged and abandoned gas storage well (nonspecific depth)		lineweight .2 mm 	
19.5.94	Shallow gas storage well			
19.5.95	Plugged and abandoned shallow gas storage well			Use if both shallow and deep gas storage wells are shown on map. May also be shown in other colors.
19.5.96	Deep gas storage well		lineweight .2 mm outer circle diameter 2.75 mm 	
19.5.97	Plugged and abandoned deep gas storage well		all lineweights .2 mm 	
19.5.98	Observation well for gas-storage field (nonspecific depth)		diameter 1.5 mm all lineweights .2 mm 0.725 mm 	May also be shown in other colors.
19.5.99	Plugged and abandoned observation well for gas-storage field [nonspecific depth]		all lineweights .2 mm 	
19.5.100	Shallow observation well for gas-storage field			Use if both shallow and deep observation wells are shown on map. May also be shown in other colors.
19.5.101	Plugged and abandoned shallow observation well for gas-storage field			
19.5.102	Deep observation well for gas-storage field		all lineweights .2 mm outer circle diameter 2.75 mm 	
19.5.103	Plugged and abandoned deep observation well for gas-storage field		all lineweights .2 mm 	

*For more information, see general guidelines on pages A-i to A-v.